

Study Title

**Bioinformatics Evaluation of the CP4 EPSPS Protein Utilizing the AD_2010,
TOX_2010, and PRT_2010 Databases**

Authors

[REDACTED]

Study Completed On

February 23, 2010

Sponsor and Performing Laboratory

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Laboratory Project ID

MSL0022522

Study Number: REG-10-042

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Submitter

Date: _____

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Author

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Study Title: Bioinformatics Evaluation of the CP4 EPSPS Protein Utilizing the AD_2010, TOX_2010, and PRT_2010 Databases

Study Number: REG-10-042

Reviews conducted by the Quality Assurance Unit confirm that the final report accurately describes the methods and standard operating procedures followed and accurately reflects the raw data of the study.

Following is a list of reviews conducted by the Monsanto Regulatory Quality Assurance Unit on the study reported herein.

Dates of Inspection/Audit	Phase	Date Reported to Study Director	Date Reported to Management
02/19/2010	Draft Report and Data Audit	02/19/2010	02/19/2010



Quality Assurance Specialist
Monsanto Regulatory, Monsanto Company

Study Certification Page

This report is an accurate and complete representation of the study/project activities.

Signatures of Final Report Approval:



Author



Lead, Regulatory Product Characterization Center

Study Information

Study Number: REG-10-042

Title: Bioinformatics Evaluation of the CP4 EPSPS Protein
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Study Start Date: January 22, 2010

Study Completion Date: February 23, 2010

Records Retention: All study specific raw data and final report will be retained at
Monsanto-St. Louis.

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Abbreviations and Definitions

AA	Amino acid
AD_2010	Allergen and gliadin protein sequence database (Release date January 22, 2010)
BLOCKS	A database of amino acid motifs found in protein families
BLOSUM50	BLOcks SUBstitution Matrix, used to score similarities between pairs of distantly related of protein or nucleotide sequences
CP4 EPSPS	5-enolpyruvylshikimate-3-phosphate synthase from <i>Agrobacterium tumefaciens</i> sp. strain CP4
E-Score	Expectation Score
FASTA	Algorithm used to find local high scoring alignments between a pair of protein or nucleotide sequences
GenBank	A public genetic database maintained by the National Center for Biotechnology Information at the National Institutes of Health, Bethesda, MD
GI	Gene Identification number
NCBI	National Center of Biotechnology Information at the National Institutes of Health, Bethesda, MD, USA
ORF	Open Reading Frame
PRT_2010	GenBank protein database, 175.0 (Release date January 22, 2009)
TOX_2010	Toxin protein sequence database (Release date January 22, 2010)

1.0 Summary

The bioinformatic evaluation of CP4 EPSPS has been conducted several times throughout the research and development process, with all reports concluding that the CP4 EPSPS protein was not similar to known allergens, toxins (Silvanovich, 2009), or other biologically active proteins (Tu and Silvanovich, 2009) that may adversely affect human or animal health. Periodically, the databases used to evaluate proteins are updated. The allergen database (AD_2010) has been revised and published (FARRP, 2010; Tu and Silvanovich, 2010) and the new toxin (TOX_2010) and protein (PRT_2010) sequence databases have been assembled (Tu and Silvanovich, 2010). In order to determine if the CP4 EPSPS protein shares significant sequence similarity to new sequences contained in the updated allergen, toxin or protein databases, the CP4 EPSPS protein sequence was used as a query for a FASTA and Sliding Window search of the AD_2010 database and a FASTA search of the TOX_2010 and PRT_2010 databases.

Results indicate there were no biologically relevant sequence similarities to allergens or toxins when the CP4 EPSPS protein sequence was used as a query for a FASTA search of the AD_2010 or TOX_2010 database. Furthermore, no short (eight amino acid) polypeptide matches were shared between the CP4 EPSPS protein sequence and proteins in the updated allergen database. When searching the PRT_2010 database, results confirm that no biologically relevant structural similarity to proteins of concern was observed for CP4 EPSPS sequence. These data are consistent with those previously reported (Silvanovich, 2009; Tu and Silvanovich, 2009), where it was concluded that there was a lack of structurally relevant sequence similarity to allergens, toxins or other biologically active proteins that could be harmful to human or animal health.

2.0 Sequence Database Preparation

The allergen, gliadin, and glutenin sequence database (AD_2010) was obtained from FARRP (2010)¹ and was used as provided. The AD_2010 database contains 1,471 sequences. A complete description of the AD_2010 database can be found in Tu and Silvanovich (2010).

GenBank protein database, release 175.0 (December 15, 2009), was downloaded from NCBI and formatted for use in these bioinformatic analyses. It is referred to herein as the PRT_2010 database and contains 17,815,538 sequences. A complete description of the PRT_2010 database can be found in Tu and Silvanovich (2010).

¹ located at <http://www.allergenonline.com>

The toxin database is a subset of sequences derived from the PRT_2010 database that was selected using a keyword search and filtered to remove likely non-toxin proteins. It is referred to herein as the TOX_2010 database and contains 8,448 sequences. A complete description of the TOX_2010 database can be found in Tu and Silvanovich (2010).

3.0 Sequence Database Searches

The CP4 EPSPS sequence (Figure 1) used in this analysis was the same as that used previously as described in Silvanovich (2009). FASTA analyses using the AD_2010, TOX_2010, and PRT_2010 databases were performed on a virtual machine loaded with a SUSE LINUX version 10 operating system and FASTA version 3.4t26 (July 7, 2006). The structural similarity of the protein sequence to sequences in each database (AD_2010, TOX_2010, and PRT_2010) was assessed using the FASTA algorithm (Lipman and Pearson, 1985; Pearson and Lipman, 1988). In the case of FASTA searches of the PRT_2010 database performed using the CP4 EPSPS sequence, the Appendix 1 was truncated to display only the top 50 alignments.

FASTA comparisons are initiated by aligning the first match of a specific wordsize. The alignment is then extended based on the chosen scoring matrix. Specific FASTA comparison parameters used in this study included a wordsize (k-tuple) of two, a gap creation penalty of 10, and a gap extension penalty of two. The expectation score (*E*-score) was set to ten for searches of the AD_2010 and TOX_2010 databases and one for the PRT_2010 database. The *E*-score is a statistical measure of the likelihood that the observed similarity score could have occurred by chance in a search. A larger *E*-score indicates a lower degree of similarity between the query sequence and the sequence from the database. Typically, alignments between two sequences will need to have an *E*-score of 1e-5 or smaller to be considered to have significant homology. FASTA comparisons were performed using the BLOSUM50 scoring matrix (Henikoff and Henikoff, 1992). Multiple alignments are made between the query sequence and each sequence in the database with a score calculated for each alignment. Only the top scoring alignment is extensively analyzed for each database sequence. The BLOSUM50 matrix series (Henikoff and Henikoff, 1992) was derived from a set of aligned, ungapped regions from protein families, called the BLOCKS database. Sequences from each block were clustered based on the percent of identical residues in the alignments (Henikoff and Henikoff, 1996). The BLOSUM50 matrix will identify blocks of conserved residues that are at least 50% identical. BLOSUM50 works well for identifying sequence similarities that include gaps, and thus recognizes distant evolutionary relationships (Pearson, 2000).

If two proteins share sufficient linear sequence similarity and identity, they will also share three-dimensional structure and, therefore, functional homology. By definition,

homologous proteins share secondary structure and common three-dimensional folds (Pearson, 2000). Because the degree of relatedness between homologs varies widely, the data need to be carefully evaluated in order to maximize their potential predictive value. The allergenicity assessment is used to identify known allergens or potentially cross-reactive proteins. While related (homologous) proteins may share 25% amino acid identity in a 200 amino acid overlap (Pearson, 2000), this is not generally sufficient to indicate IgE-mediated cross-reactivity (Aalberse et al., 2001). Indeed, allergenic cross-reactivity caused by proteins is rare at 50% identity and typically requires >70% amino acid identity across the full length of the protein sequences (Aalberse, 2000). A conservative approach is currently applied by which related protein sequences are identified as potentially cross-reactive if linear identity is 35% or greater in an 80 amino acid overlap (Thomas et al., 2005). Such levels of identity are readily detected using FASTA. Additionally, proteins closely related to gliadins or glutenins, the proteins that trigger celiac disease, can be easily identified using FASTA.

4.0 Significance of the Alignment

An *E*-score of $1e-5$ was set as an initial high cut-off value for alignment significance. Although all alignments were inspected visually, any aligned sequence that yielded an *E*-score less than or equal to $1e-5$ was analyzed further to determine if such an alignment represented significant sequence homology.

5.0 Results and Discussion

Potential structural similarities shared between the CP4 EPSPS protein and proteins in the allergen, toxin, or protein databases were evaluated using the FASTA sequence alignment tool. Identified proteins were ranked according to their degree of similarity (Appendix 1).

5.1 Assessment of Potential Allergenicity

Using CP4 EPSPS as the query sequence to search the AD_2010 database, the top alignment was with GI-21725588 with an *E*-score of 1.5. Due to the high *E*-score value, this is not a meaningful alignment. No alignment met or exceeded the threshold of 35% identity over 80 amino acids recommended by Codex Alimentarius (2003). Furthermore, no eight contiguous amino acid identities were detected when the CP4 EPSPS protein sequence was compared to the AD_2010 sequence database (Appendix 1).

5.2 *Assessment of Potential Toxicity*

Using CP4 EPSPS as the query sequence to search the TOX_2010 database, the top alignment was with GI-267990064 with an *E*-score of 1.7. Due to the high *E*-score value, this is not a meaningful alignment (Appendix 1).

5.3 *Assessment of Potential Adverse Biological Activity*

Using CP4 EPSPS as the query sequence to search the PRT_2010 database, the top alignment positively identified CP4 EPSPS (GI: 27549260) with 100.00% identity over 455 amino acids with an *E*-score of 1.8e-173 (Appendix 1). The positive identification of CP4 EPSPS does not indicate potential adverse biological activity of the CP4 EPSPS protein.

6.0 **Conclusions**

The results of these data indicate that no biologically relevant sequence similarities were observed between the CP4 EPSPS protein and allergen, toxin, or biologically active proteins. These results and conclusion are consistent with those previously reported by Silvanovich (2009) and Tu and Silvanovich (2009), which concluded that CP4 EPSPS demonstrated no structurally relevant sequence similarity to allergen, toxin, or other biologically active proteins that could be harmful to human or animal health.

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1 MLHGASSRPA TARKSSGLSG TVRIPGDKSI SHRSFMFGGL ASGETRITGL
51 LEGEDVINTG KAMQAMGARI RKEGDTWIID GVGNGGLLAP EAPLDFGNAA
101 TGCRLTMGLV GYDFDSTFI GDASLTKRPM GRVLNPLREM GVQVKSEDGD
151 RLPVTLRGPK TPTPITYRVP MASAQVKSAV LLAGLNTPGI TTVIEPIMTR
201 DHTEKMLQGF GANLTVETDA DGVRTIRLEG RGKLTGQVID VPGDPSSTAF
251 PLVAALLVPG SDVTILNVLM NPTRTGLILT LQEMGADIEV INPRLAGGED
301 VADLRVRSST LKGVTVPEDR APSMIDEYPI LAVAAFAEG ATVMNGLEEL
351 RVKESDRLSA VANGKLNGV DCDEGETSLV VRGRPDGKGL GNASGAAVAT
401 HLDHRIAMSF LVMGLVSENP VTVDDATMIA TSFPEFMDLM AGLGAKIELS
451 DTKAA

Figure 1: The CP4 EPSPS Protein Sequence

Appendix 1. Bioinformatic analysis of polypeptide CP4_EPSPS

```
>CP4_EPSPS
MLHGASRRATARKSGSLSGTVRIPODKSISHRSMFGGLASGETRITGLLEGEDVINTGKAMQAMGARIKRGDT
WIIDGVNGGLIAPEDLDFGNAATGCRLLTMGLVGVYDFDSFI GDASLTKRPMGRVNLPLREMGVQVKSEGDRL
VTLRGPKTPTETIVRPMASQVKSAYLLAGLITPGITTVIEPIMTRDHTKMLQGFGANLTVETDADGVRTIRL
EGRGKLTGOVIDVPGDPSAPLVAALLVPGSDVTILNVLNPTRTGLILTLQEMGADIEVINPRLAGGEDVADL
RVRSSTLKGVTPEDRAPSMIDEPILAVAAAFAGATVMNGLEELRVKESDRLSAVANGLKLINGVDDCEGETSLV
VRGRPDGKGLGNASGAATAHLDRHIAMSFLVMGLVSENPVTVDATMIATSFPEFMDLMAGLIGAKIELSDTKAA
```

Sliding 8 amino acid window search
Database searched = AD_2010
Query = CP4_EPSPS

Start time: Fri Jan 22 19:50:55 GMT 2010 Finish time: Fri Jan 22 19:50:55
GMT 2010

No 8 amino acid matches exist between CP4_EPSPS and the AD_2010 database

```
# fasta34 CP4_EPSPS.pep /genedata/1/db/AD_2010 -Q -E 10 -O
CP4_EPSPS.pep_ad.fasta
FASTA searches a protein or DNA sequence data bank version 3.4t26 July 7,
2006
```

Please cite:

W.R. Pearson & D.J. Lipman PNAS (1988) 85:2444-2448

CP4_EPSPS, 455 aa

vs /genedata/1/db/AD_2010 library

```
opt      E()
< 20      3      0:=
22      0      0:
24      0      0:
26      0      0:
28      0      0:
30      2      2:*
32      5      8:=*
34      32      21:=====*=====
36      32      44:=====*
38      41      72:=====*
40      70      101:=====*
42      108     123:=====
44      108     136:=====
46      121     138:=====
48      140     132:=====
50      125     121:=====
52      106     106:=====
```

one = represents 3 library sequences

```
54      113      91:=====*=====
56      66      76:=====*
58      68      62:=====*=====
60      46      50:=====*
62      51      40:=====*=====
64      22      32:=====*
66      27      25:=====*
68      30      20:=====*=====
70      42      16:=====
72      32      12:=====
74      22      10:=====
76      14      7:=====
78      13      6:=====
80      3       4:=====
82      4       3:=====
84      3       3:=====
86      4       2:=====
88      1       2:=====
90      0       1:=====
92      1       1:=====
94      5       1:=====
96      7       1:=====
98      0       0:=====
100     1       0:=====
102     0       0:=====
104     0       0:=====
106     0       0:=====
108     0       0:=====
110     0       0:=====
112     0       0:=====
114     0       0:=====
116     0       0:=====
118     0       0:=====
>120     0       0:=====
331323 residues in 1471 sequences
Expectation_n fit: rho(ln(X))= 5.19540.00476; mu= 10.7535 0.252
mean_var=72.607822.942, 0's: 3 Z-trim: 3 B-trim: 219 in 1/42
Lambda= 0.150516
Kolmogorov-Smirnov statistic: 0.0856 (N=29) at 46

FASTA (3.5 Sept 2006) function [optimized, BL50 matrix (15:-5)] ktup: 2
join: 37, opt: 25, open/ext: -10/-2, width: 16
The best scores are:
gi|121725588|emb|CAD38375.1| unnamed protein produc ( 129) 78 25.8 1.5
gi|121725602|emb|CAD38382.1| unnamed protein produc ( 129) 76 25.4 2
gi|121725604|emb|CAD38383.1| unnamed protein produc ( 129) 76 25.4 2
gi|121725594|emb|CAD38378.1| unnamed protein produc ( 129) 75 25.1 2.3
gi|121725596|emb|CAD38379.1| unnamed protein produc ( 129) 75 25.1 2.3
gi|121725600|emb|CAD38381.1| unnamed protein produc ( 129) 75 25.1 2.3
gi|121725592|emb|CAD38377.1| unnamed protein produc ( 129) 75 25.1 2.3
gi|121725590|emb|CAD38376.1| unnamed protein produc ( 129) 75 25.1 2.3
```



```
gi|1346568|sp|P49372.1|ALL1 APIGR RecName: Full=Wa ( 154) 75 25.2 2.7
gi|21725584|emb|CAD38373.1| unnamed protein produc ( 129) 74 24.9 2.7
gi|21725586|emb|CAD38374.1| unnamed protein produc ( 129) 74 24.9 2.7
gi|21725582|emb|CAD38372.1| unnamed protein produc ( 129) 74 24.9 2.7
gi|224016002|gb|ACN32322.1| tropomyosin [Ascaris 1 ( 287) 78 26.0 2.8
gi|17978844|gb|AAL47677.1| major Der f 2 isoform [ ( 129) 73 24.7 3.2
gi|21920|emb|CAA39099.1| CM2 protein [Triticum tur ( 145) 70 24.1 5.4
gi|9280360|gb|AAF66369.1| major allergen I 18KDa a ( 150) 68 23.7 7.5
gi|21713|emb|CAA35597.1| unnamed protein product [ ( 168) 68 23.7 8.2
gi|100834|pir||S16031 alpha-amylase inhibitor, tet ( 168) 68 23.7 8.2
gi|54039254|sp|P67875.1|RNMG_ASFPU RecName: Full=R ( 176) 68 23.7 8.5

>>gi|21725588|emb|CAD38375.1| unnamed protein product [D ( 129 aa)
initn: 57 init1: 57 opt: 78 Z-score: 99.3 bits: 25.8 E(): 1.5
Smith-Waterman score: 78; 25.882% identity (56.471% similar) in 85 aa
overlap (224-303:48-129)

CP4_EP IEPIIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVIDVPG-DPSSTAFPL
200 210 220 230 240 250
260 270 280 290 300
310 320 330 340 350 360

gi|217 VFGCHGNEPCIIHSGKPFQLEALFEANQNSATAKIEIKASIDGLSVDVPGIDPNACHY--
20 30 40 50 60 70
80 90 100 110 120

CP4_EP VAALLVPGSDVTI---LNV-LMNPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS
260 270 280 290 300
310 320 330 340 350 360

gi|217 MNCPLVNGQQYDIKYTNWVPKIAFNSENVVTVKVLG-DNGVLACAIATHAKIQD
80 90 100 110 120
200 210 220 230 240 250
260 270 280 290 300
310 320 330 340 350 360

CP4_EP STLKGVTPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSAVANGKLIN

>>gi|21725602|emb|CAD38382.1| unnamed protein product [D ( 129 aa)
initn: 54 init1: 54 opt: 76 Z-score: 96.9 bits: 25.4 E(): 2
Smith-Waterman score: 76; 26.190% identity (55.952% similar) in 84 aa
overlap (225-303:49-129)

CP4_EP AALLVPGSDVTI---LNV-LMNPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS
260 270 280 290 300
310 320 330 340 350 360

gi|217 PGCHGSEPCIHSGKPFQLEALFEANQNSATAKIEIKASIDGLSVDVPGIDPNACNY--M
20 30 40 50 60 70
80 90 100 110 120

CP4_EP TLKGVTPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSAVANGKLNG
310 320 330 340 350 360

>>gi|21725594|emb|CAD38378.1| unnamed protein product [D ( 129 aa)
initn: 54 init1: 54 opt: 75 Z-score: 95.8 bits: 25.1 E(): 2.3
Smith-Waterman score: 75; 26.190% identity (55.952% similar) in 84 aa
overlap (225-303:49-129)

CP4_EP EPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVIDVPG-DPSSTAFPLV
200 210 220 230 240 250
260 270 280 290 300
310 320 330 340 350 360

gi|217 PGCHGNEPCIIHSGKPFQLEALFEANQNSATAKIEIKASIDGLSVDVPGIDPNACNY--M
20 30 40 50 60 70
80 90 100 110 120

CP4_EP TLKGVTPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSAVANGKLNG
310 320 330 340 350 360

>>gi|21725596|emb|CAD38379.1| unnamed protein product [D ( 129 aa)
initn: 54 init1: 54 opt: 75 Z-score: 95.8 bits: 25.1 E(): 2.3
Smith-Waterman score: 75; 26.190% identity (54.762% similar) in 84 aa
overlap (225-303:49-129)

CP4_EP EPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVIDVPG-DPSSTAFPLV
200 210 220 230 240 250
260 270 280 290 300
310 320 330 340 350 360

gi|217 PGCHGNEPCIIHSGKPFQLEALFEANQNSATAKIEIKASIDGLSVDVPGIDPNACNY--M
20 30 40 50 60 70
80 90 100 110 120
```

```
CP4_EP TLKGVTPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSAVANGKLNG
260 270 280 290 300
310 320 330 340 350 360

>>gi|21725604|emb|CAD38383.1| unnamed protein product [D ( 129 aa)
initn: 54 init1: 54 opt: 76 Z-score: 96.9 bits: 25.4 E(): 2
Smith-Waterman score: 76; 26.190% identity (55.952% similar) in 84 aa
overlap (225-303:49-129)

CP4_EP EPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVIDVPG-DPSSTAFPLV
200 210 220 230 240 250
260 270 280 290 300
310 320 330 340 350 360

gi|217 PGCHGNEPCIIHSGKPFQLEALFEANQNSATAKIEIKASIDGLSVDVPGIDPNACNY--M
20 30 40 50 60 70
80 90 100 110 120

CP4_EP AALLVPGSDVTI---LNV-LMNPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS
260 270 280 290 300
310 320 330 340 350 360

gi|217 KCPVLVNGQQYDIKYTNWVPKIAFNSENVVTVKVLG-DNGVLACAIATHAKIQD
80 90 100 110 120
200 210 220 230 240 250
260 270 280 290 300
310 320 330 340 350 360

>>gi|21725594|emb|CAD38378.1| unnamed protein product [D ( 129 aa)
initn: 54 init1: 54 opt: 75 Z-score: 95.8 bits: 25.1 E(): 2.3
Smith-Waterman score: 75; 26.190% identity (55.952% similar) in 84 aa
overlap (225-303:49-129)

CP4_EP EPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVIDVPG-DPSSTAFPLV
200 210 220 230 240 250
260 270 280 290 300
310 320 330 340 350 360

gi|217 PGCHGNEPCIIHSGKPFQLEALFEANQNSATAKIEIKASIDGLSVDVPGIDPNACNY--M
20 30 40 50 60 70
80 90 100 110 120

CP4_EP TLKGVTPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSAVANGKLNG
310 320 330 340 350 360

>>gi|21725596|emb|CAD38379.1| unnamed protein product [D ( 129 aa)
initn: 54 init1: 54 opt: 75 Z-score: 95.8 bits: 25.1 E(): 2.3
Smith-Waterman score: 75; 26.190% identity (54.762% similar) in 84 aa
overlap (225-303:49-129)

CP4_EP EPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVIDVPG-DPSSTAFPLV
200 210 220 230 240 250
260 270 280 290 300
310 320 330 340 350 360

gi|217 PGCHGNEPCIIHSGKPFQLEALFEANQNSATAKIEIKASIDGLSVDVPGIDPNACNY--M
20 30 40 50 60 70
80 90 100 110 120
```

```
20      30      40      50      60      70
260
CP4_EP AALLVPGSDVTI---LNV-LMNPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS
gi|217 KCPLVNGQQYDIKYTNWPKIAPKSENVVTVKVLG-DNGVLACAIATHAKIQD
80      90      100      110      120
310      320      330      340      350      360
CP4_EP TLKGVTVPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSAVANGKLNG

>>gi|21725600|emb|CAD38381.1| unnamed protein product [D (129 aa)
  initn: 35 init1: 35 opt: 75 Z-score: 95.8 bits: 25.1 E(): 2.3
Smith-Waterman score: 75; 26.190% identity (55.952% similar) in 84 aa
overlap (225-303:49-129)

200      210      220      230      240      250
CP4_EP EPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRGKLTGQVIDVPG-DPSSTAFLV
310      320      330      340      350      360
CP4_EP TLKGVTVPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSAVANGKLNG

>>gi|21725600|emb|CAD38381.1| unnamed protein product [D (129 aa)
  initn: 35 init1: 35 opt: 75 Z-score: 95.8 bits: 25.1 E(): 2.3
Smith-Waterman score: 75; 26.190% identity (55.952% similar) in 84 aa
overlap (225-303:49-129)

200      210      220      230      240      250
CP4_EP EPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRGKLTGQVIDVPG-DPSSTAFLV
gi|217 KCPLVNGQQYDIKYTNWPKIAPKSENVVTVKVLG-DNGVLACAIATHAKIQD
80      90      100      110      120
310      320      330      340      350      360
CP4_EP TLKGVTVPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSAVANGKLNG

>>gi|21725592|emb|CAD38377.1| unnamed protein product [D (129 aa)
  initn: 54 init1: 54 opt: 75 Z-score: 95.8 bits: 25.1 E(): 2.3
Smith-Waterman score: 75; 26.190% identity (55.952% similar) in 84 aa
overlap (225-303:49-129)

200      210      220      230      240      250
CP4_EP EPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRGKLTGQVIDVPG-DPSSTAFLV
gi|217 KCPLVNGQQYDIKYTNWPKIAPKSENVVTVKVLG-DNGVLACAIATHAKIQD
80      90      100      110      120
310      320      330      340      350      360
CP4_EP TLKGVTVPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSAVANGKLNG
```

```
>>gi|21725590|emb|CAD38376.1| unnamed protein product [D (129 aa)
  initn: 54 init1: 54 opt: 75 Z-score: 95.8 bits: 25.1 E(): 2.3
Smith-Waterman score: 75; 26.190% identity (55.952% similar) in 84 aa
overlap (225-303:49-129)

200      210      220      230      240      250
CP4_EP EPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRGKLTGQVIDVPG-DPSSTAFLV
gi|217 KCPLVNGQQYDIKYTNWPKIAPKSENVVTVKVLG-DNGVLACAIATHAKIQD
80      90      100      110      120
310      320      330      340      350      360
CP4_EP TLKGVTVPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSAVANGKLNG

>>gi|1346568|sp|P49372.1|ALL1_APIGR RecName: Full=Major (154 aa)
  initn: 38 init1: 38 opt: 75 Z-score: 94.7 bits: 25.2 E(): 2.7
Smith-Waterman score: 75; 22.059% identity (50.735% similar) in 136 aa
overlap (189-319:2-131)

160      170      180      190      200      210
CP4_EP PKTPTITRVPMASQVKSALLAGLNTPGITTVIEPIIMTRDHTKMLQGF--GANLIV
gi|134 MGQTHVLELTSSVSAEKIFQGFVIDVDIVL
10      20      30
220      230      240      250      260      270
CP4_EP ETDADGV-RTIRLEGRG-KLTGQVIDVP-GDPSSTAFLVAALLVPGSDVTILNVLNPT
gi|134 PRAAPGAYKSVETKGGGGTILKIITLPDGGPITT-----MTLRIDGVNKEALTFDYSVI
40      50      60      70      80
280      290      300      310      320      330
CP4_EP RTGLILTLQEMGADIEVINPRLAGGEDVADLRVRSSTLKGVTVPEDRAPSMIDEXPIILAV
gi|134 DGDILLGFIESIENHVVLVPTADGG-SICKTTAIFHTKGDVAVVPEENIKRYANEQNTALEFK
90      100      110      120      130      140
340      350      360      370      380      390
CP4_EP AAFAEGATVMNGLEELRVKESDRLSAVANGKLNGVDCDEGETSLVVRGRPDGKGLGNA
gi|134 ALEAYLIAN
150

>>gi|21725584|emb|CAD38373.1| unnamed protein product [D (129 aa)
  initn: 54 init1: 54 opt: 74 Z-score: 94.6 bits: 24.9 E(): 2.7
```

	260	270	280	290	300
CP4_EP	AALLVPGSDVTI	---LNV-LMNPRTGL	LILTLQEMGADIEVIN	PRLAGGEDVADLRVSS	

>>>gi21920|emb|CAA30099.1| CM2 protein [Triticum turgidu (145 aa)
infn: 54 initl: 54 opt: 70 Z-score: 89.2 bits: 24.1 E(): 5.4
Smith-Waterman score: 70; 24.77% identity (48.624% similar) in 109 aa
overlapp (170-277,40-143)

```
140      150      160      170      180      190
CP4_EP  MGQVQKSEGDGRPLVTLRGPKTPTFTYRVPMASAQVKSAVLLAGLNTPGITTVIEPIMT
      . . . . . : . . . : . . . :
gi|219  LLLAAVLVSFAAAAAATGECYCPGMLPSNPLEGRCREYVAQQTGCGVIGSPVSTEPGNT
      10      20      30      40      50      60
      200      210      220      230      240      250
CP4_EP  -RDHTEKMLQGFGANLTVETDADGVRTIRLEGRGKLTGGVIDVPGDPSSTAFPLVAALLV
      . . . : . . . : . . . : . . . : . . . :
gi|219  PRDRCKEL--YDASQHCCEA--VRYFIGRTSDENSGVLKDLPGCPREPQDFAKVLVT
      70      80      90      100      110      120
      260      270      280      290      300      310
CP4_EP  PGSDVTILNVLMNPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVRSSTLKGVTVPE
      . . : . . . . : . . :
gi|219  PGH-CNVMTVHNTPYCLGLDI
      130      140

>>gi|9280360|gb|AAF86369.1| major allergen I 18kDa antigen (150 aa)
      initn: 57 initl: 57 opt: 68 Z-score: 86.6 bits: 23.7 E(): 7.5
      Smith-Waterman score: 68; 41.667% identity (70.833% similar) in 24 aa
      overlap (77-99:50-73)

      50      60      70      80      90      100
CP4_EP  ITGLLEGEDVINTGRAMQAMGARIRKEGDTWIIDGV-GNGGLLAPEAPLDFGNAATGCRL
      . . . : . . . : . . . : . . . :
gi|928  KRLLYNQAKAESNSHAPLSDGKTGSSYAHWFTNGYDNGKLIKGRTPIKFGKADCDRPP
      20      30      40      50      60      70
      110      120      130      140      150      160
CP4_EP  TMGLVGVDYDFDSTFIGDASLTKRPMGRVNLPLREMGVQVKSEDDGRLPVTLRGPKTPTPI
      80      90      100      110      120      130
gi|928  KHSQNGMGKDDHYLLEFFTPDPGDHYKFDKSNKPKEDPGPARVIYTYPNKVFCGIVAHQR
      80      90      100      110      120      130

>>gi|21713|emb|CAA35597.1| unnamed protein product [Trit (168 aa)
      initn: 61 initl: 61 opt: 68 Z-score: 85.9 bits: 23.7 E(): 8.2
      Smith-Waterman score: 68; 37.838% identity (62.162% similar) in 37 aa
      overlap (238-272:124-160)

      210      220      230      240      250      260
CP4_EP  QGFGANLTVETDADGVRTIRLEGRGKLTGGVIDVPGDPSSTAFPLVAALLVPG--SDVTI
      . . . . . : . . . : . . . : . . . :
gi|217  CRCEALRYFIALPVPSQPVDPSPRGVNGESGLIDLPGCPREMOWDFVRLIVAPGQCNLATI
      100      110      120      130      140      150
      270      280      290      300      310      320
CP4_EP  LNVLMNPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVRSSTLKGVTVPEDRAPSMI
      . . . :
gi|217  HNVRYCPAVEQPLWI
```

```
160

>>gi|100834|pir|S16031 alpha-amylase inhibitor, tetrame (168 aa)
      initn: 61 initl: 61 opt: 68 Z-score: 85.9 bits: 23.7 E(): 8.2
      Smith-Waterman score: 68; 37.838% identity (62.162% similar) in 37 aa
      overlap (238-272:124-160)

      210      220      230      240      250      260
CP4_EP  QGFGANLTVETDADGVRTIRLEGRGKLTGGVIDVPGDPSSTAFPLVAALLVPG--SDVTI
      . . . . . : . . . : . . . : . . . :
gi|100  CRCEALRYFIALPVPSQPVDPSPRGVNGESGLIDLPGCPREMOWDFVRLIVAPGQCNLATI
      100      110      120      130      140      150
      270      280      290      300      310      320
CP4_EP  LNVLMNPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVRSSTLKGVTVPEDRAPSMI
      . . : . . . . :
gi|100  HNVRYCPAVEQPLWI
      160

>>gi|54039254|sp|P67875.1|RNMG_ASPFU RecName: Full=Ribon (176 aa)
      initn: 57 initl: 57 opt: 68 Z-score: 85.7 bits: 23.7 E(): 8.5
      Smith-Waterman score: 68; 41.667% identity (70.833% similar) in 24 aa
      overlap (77-99:77-100)

      50      60      70      80      90      100
CP4_EP  ITGLLEGEDVINTGRAMQAMGARIRKEGDTWIIDGV-GNGGLLAPEAPLDFGNAATGCRL
      . . . : . . . : . . . : . . . :
gi|540  KRLLYSQAKAESNSHAPLSDGKTGSSYPHWFTNGYDNGKLIKGRTPIKFGKADCDRPP
      50      60      70      80      90      100
      110      120      130      140      150      160
CP4_EP  TMGLVGVDYDFDSTFIGDASLTKRPMGRVNLPLREMGVQVKSEDDGRLPVTLRGPKTPTPI
      110      120      130      140      150      160
gi|540  KHSQNGMGKDDHYLLEFFTPDPGDHYKFDKSKPKEDPGPARVIYTYPNKVFCGIVAHQRG
      110      120      130      140      150      160

455 residues in 1 query sequences
331323 residues in 1471 library sequences
Scomplib [34t26]
start: Fri Jan 22 19:50:54 2010 done: Fri Jan 22 19:50:54 2010
Total Scan time: 0.060 Total Display time: 0.010
Function used was FASTA [version 3.4t26 July 7, 2006]
```

```
# fasta34 CP4_EFSPS.pep /genedata/1/db/TOX_2010 -Q -E 10 -O
CP4_EFSPS.pep.tx.fasta
```



```

CP4_EP VIEPIINTDHTKMLQGFGANLIVTDAGVTRIRLEGRKL-----TQGVTDVPGDFSST
gi|1224      : . . . . .      : : : : :      : : : : :      : : : : :
MQFKVYCTKRESRYLFVDVQSDIIDTPG--RRM      10      20      30

                250      260      270      280      290      300
CP4_EP AFLPLVAALL-----VPGSDVILNLVNLNPTRTGLIITLQEMGADIEVINPLRAGEDVADL
gi|1224      : : : : :      : : . . . . .      : : . . . . .      : : . . . . .
AVPLVSARLLSEKVPRLPYVMHIGDEPYR--LIT-----TDMTSV-PAIVIGEEVADL      40      50      60      70      80

                310      320      330      340      350      360
CP4_EP RVRSITLKVIVPDRAPSMIDEPYILAVAAFAEGATVMNGLEELRVKESDRLSAVANG
gi|1224      : : . . .      : : : : :      : : : : :      : : : : :
SLRENDIKNAINLMFRGI      90      100

>>>gi|16445235|gb|AAL23453.1| toxin addiction system: tox (101 aa)
initn: 53 init1: 53 opt: 80 Z-score: 112.1 bits: 27.8 E(): 1.7
Smith-Waterman score: 94; 31.63% identity (55.102% similar) in 98 aa
overlap (223-312:5-91)

```

```
qi | 164 AVPLVSARLLSEKVPRLDYPVHMIGDEPYR--LLT-----TDMTSV-PATVIGEIVADL
```

CP4_EP RVRSSLKGVTPEDRAPSMID EYPI LAVAAFAEGATVMNGLEELRVKESDRLSAVANG
 i||164 SRENDIKNAINLMFRGI

```
>>gi|169246228|gb|ACA51202.1| toxin addiction system tox (101 aa)
      initn: 53 initl: 53 opt: 80 Z-score: 112.1 bits: 27.8 E(): 1.
      Smith-Waterman score: 94; 31.633% identity (55.102% similar) in 98
      overlap (223-312:5-91)
```

```

CP4_EP VIEPTMTDHTKMLQCGFANLIVTDAGVTRIRLEGRGL-----TQGVIDVPGPSST
gi|169      : . . . . . : ..... :
           MQKVYTCRESRYRLFVDVQSDIIDTFG--RRM
                10    20    30

```

>>gi|52854786|gb|AAU88265.1| cytolethal distending toxin (258 aa)
 initn: 46 init1: 46 opt: 80 Z-score: 102.8 bits: 27.4 E(): 5.5

>>gi|52854786|gb|AAU88265.1| cytolethal distending toxin (258 aa)
 initn: 46 init1: 46 opt: 80 Z-score: 102.8 bits: 27.4 E(): 5.5

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```
gi|1119 PTNAPIPEVPGTAPAVSLMNMGDGSLVLTNWSRGAGSSLWAYIYISDSNFGELRNWQIMPG
```

>>>gi|38154547|gb|AAR12197.1| cytotolethal distending toxin (258 aa)
initn: 47 initl: 47 opt: 79 Z-score: 101.5 bits: 27.2 E(): 6.5
Smith-Waterman score: 79; 36.170% identity (48.936% similar) in 47 aa
overlap (132-176:34-80)

CP4_EP GCRLTMGLGVYDFDSFTFGDASLTRPMGRVLNPLRMGVQYKSEGDGLPVLTRGPKT
gi|381 KYTPIFIAGILPILLNGSSGNKAHLDPKVFPPQVEGFTFSPDEPGLPLPGAGPAL

```

CP4_EP PT--PITYRPMASQKAVLLAGLNTPGITTVIEPTMTDHTKMLQFGANLTVEID
      170      180      190      200      210
      :: :: :: :: ::
gi | 381 PTNAPIPPIVPGTAPAVLNMNDGSLVTWMSRGAGSSUWAYIISDNSFGELRNQIMPG

```

>>>gi|23574038|emb|CAD48849.1| cytolethal distending toxin (258 aa)
initn: 47 init1: 47 opt: 79 Z-score: 101.5 bits: 27.2 E(): 6.5
Smith-Waterman score: 79; 36.170% identity (48.936% similar) in 47 aa
overlap (132-176:34-80)

CP4_EP GCRLTGLGVYDFDSFTFGDASLTRPMGRVLPRLRMGVQVKSEGDGRLPVLTRGPKT
gi|235 KYTPFIAGILIPILLNGSSGNKAHLDPKVFPPQVEGGFTFSPDEPGPLPLPGAGPAL

CP4_EP_PT--PITRVPNASQVKSAVLAGLNTFGITTVIEPIMRDHTKMLQGEGANLTVEYTD
:: :: :: :: ::
gi | 235 PTNAPIPTPVPGTAPASVLNMNDGSLVTWWSRGAGS SLWAY YTSDSNFSGELRNWQMFG

>>>gi|38154551|gb|AA12200.1| cytolethal distending toxin (258 aa)
inintn: 47 initn: 47 opt: 79 Z-score: 101.5 bits: 27.2 E(): 6.5
Smith-Waterman score: 79; 36.17% identity (48.936% similar) in 47 aa
overlap (132-176:34-80)

CP4_EP GCRLTMGLGVYDFDSTFTGDSLTKRPMGRVLNPLREMGVQYKSEGDRLPVTLRGPKT
gi|381 KYTPIFIAGILPILLNGSSGKNKAHLDPKVEFPVQEGGFTFSPDEPGLPLPGAGPAL

CP4_EP_PT--PITYRVPMSAQKSAVLLAGLNTPGITTVIEPIIMTRDHTKMLQGFGANLTVETD


```
:: :: :: :: :: ::
gi|381 PTNAPIPFVPGTAPAVSLMNMDSVLTWWSRGAGSSLWAYIYSDNSFGEELRNWQIMPG
70 80 90 100 110 120

>>gi|239793097|dbj|BAH72979.1| cytolethal distending tox (258 aa)
  inith: 47 init1: 47 opt: 79 Z-score: 101.5 bits: 27.2 E(): 6.5
Smith-Waterman score: 79; 36.170% identity (48.936% similar) in 47 aa
overlap (132-176:34-80)

CP4_EP GCRLTMGLGVGYDFDSTFIGDASLTKRPMGRVNLPLREMGVQVKSEDDGRLPVTLRGPKT
110 120 130 140 150 160
:: :: :: :: :: ::
gi|239 KYTPIFIAGILLPILLNGCGSKNKAHLDPKVFPPQVEGGPTIPSPDEFGPLPGAGPAL
10 20 30 40 50 60

CP4_EP PT--PITYRVPMSAQVKSALLAGLNTFGITTVIEPIIMTRDHTKMLQGFGANLTVETD
170 180 190 200 210
:: :: :: :: :: ::
gi|239 PTNAPIPFVPGTAPAVSLMNMDSVLTWWSRGAGSSLWAYIYSDNSFGEELRNWQIMPG
70 80 90 100 110 120

>>gi|38154555|gb|AAR12203.1| cytolethal distending toxin (258 aa)
  inith: 47 init1: 47 opt: 79 Z-score: 101.5 bits: 27.2 E(): 6.5
Smith-Waterman score: 79; 36.170% identity (48.936% similar) in 47 aa
overlap (132-176:34-80)

CP4_EP GCRLTMGLGVGYDFDSTFIGDASLTKRPMGRVNLPLREMGVQVKSEDDGRLPVTLRGPKT
110 120 130 140 150 160
:: :: :: :: :: ::
gi|381 KCTSIILIVGILIPILLNGCGSKNKAHLDPKVFPPQVEGGPTIPSPDEFGPLPGAGPAL
10 20 30 40 50 60

CP4_EP PT--PITYRVPMSAQVKSALLAGLNTFGITTVIEPIIMTRDHTKMLQGFGANLTVETD
170 180 190 200 210
:: :: :: :: :: ::
gi|381 PTNAPIPFVPGTAPAVSLMNMDSVLTWWSRGAGSSLWAYIYSDNSFGEELRNWQIMPG
70 80 90 100 110 120

>>gi|239835481|dbj|BAH78166.1| cytolethal distending tox (258 aa)
  inith: 47 init1: 47 opt: 79 Z-score: 101.5 bits: 27.2 E(): 6.5
Smith-Waterman score: 79; 36.170% identity (48.936% similar) in 47 aa
overlap (132-176:34-80)

CP4_EP GCRLTMGLGVGYDFDSTFIGDASLTKRPMGRVNLPLREMGVQVKSEDDGRLPVTLRGPKT
110 120 130 140 150 160
:: :: :: :: :: ::
gi|239 KYTPIFIAGILLPILLNGCGSKNKAHLDPKVFPPQVEGGPTIPSPDEFGPLPGAGPAL
10 20 30 40 50 60

CP4_EP PT--PITYRVPMSAQVKSALLAGLNTFGITTVIEPIIMTRDHTKMLQGFGANLTVETD
170 180 190 200 210
:: :: :: :: :: ::
```

```
:: :: :: :: :: ::
gi|239 PTNAPIPFVPGTAPAVSLMNMDSVLTWWSRGAGSSLWAYIYSDNSFGEELRNWQIMPG
70 80 90 100 110 120

>>gi|253721255|gb|ACT33564.1| type III cytolethal disten (258 aa)
  inith: 47 init1: 47 opt: 79 Z-score: 101.5 bits: 27.2 E(): 6.5
Smith-Waterman score: 79; 36.170% identity (48.936% similar) in 47 aa
overlap (132-176:34-80)

CP4_EP GCRLTMGLGVGYDFDSTFIGDASLTKRPMGRVNLPLREMGVQVKSEDDGRLPVTLRGPKT
110 120 130 140 150 160
:: :: :: :: :: ::
gi|253 KCTSIILIVGILIPILLNGCGSKNKAHLDPKVFPPQVEGGPTIPSPDEFGPLPGAGPAL
10 20 30 40 50 60

CP4_EP PT--PITYRVPMSAQVKSALLAGLNTFGITTVIEPIIMTRDHTKMLQGFGANLTVETD
170 180 190 200 210
:: :: :: :: :: ::
gi|253 PTNAPIPFVPGTAPAVSLMNMDSVLTWWSRGAGSSLWAYIYSDNSFGEELRNWQIMPG
70 80 90 100 110 120

>>gi|239835441|dbj|BAH78136.1| cytolethal distending tox (258 aa)
  inith: 47 init1: 47 opt: 79 Z-score: 101.5 bits: 27.2 E(): 6.5
Smith-Waterman score: 79; 36.170% identity (48.936% similar) in 47 aa
overlap (132-176:34-80)

CP4_EP GCRLTMGLGVGYDFDSTFIGDASLTKRPMGRVNLPLREMGVQVKSEDDGRLPVTLRGPKT
110 120 130 140 150 160
:: :: :: :: :: ::
gi|239 KCTSIILIVGILIPILLNGCGSKNKAHLDPKVFPPQVEGGPTIPSPDEFGPLPGAGPAL
10 20 30 40 50 60

CP4_EP PT--PITYRVPMSAQVKSALLAGLNTFGITTVIEPIIMTRDHTKMLQGFGANLTVETD
170 180 190 200 210
:: :: :: :: :: ::
gi|239 PTNAPIPFVPGTAPAVSLMNMDSVLTWWSRGAGSSLWAYIYSDNSFGEELRNWQIMPG
70 80 90 100 110 120

>>gi|38154559|gb|AAR12206.1| cytolethal distending toxin (258 aa)
  inith: 47 init1: 47 opt: 79 Z-score: 101.5 bits: 27.2 E(): 6.5
Smith-Waterman score: 79; 36.170% identity (48.936% similar) in 47 aa
overlap (132-176:34-80)

CP4_EP GCRLTMGLGVGYDFDSTFIGDASLTKRPMGRVNLPLREMGVQVKSEDDGRLPVTLRGPKT
110 120 130 140 150 160
:: :: :: :: :: ::
gi|381 KYTPIFIAGILLPILLNGCGSKNKAHLDPKVFPPQVEGGPTIPSPDEFGPLPGAGPAL
10 20 30 40 50 60

CP4_EP PT--PITYRVPMSAQVKSALLAGLNTFGITTVIEPIIMTRDHTKMLQGFGANLTVETD
170 180 190 200 210
:: :: :: :: :: ::
```

```
:: :: :: :: :: ::
gi|381 PTNAPIPFVPGTAPAVSLMNMDSGLVTWMSRGAGSSSLWAYIYSDNSFGEELRNWQIMPG
70 80 90 100 110 120

>>gi|239793081|dbj|BAH78139.1| cytolethal distending tox (258 aa)
  in1tn: 47 in1tl: 47 opt: 79 Z-score: 101.5 bits: 27.2 E(): 6.5
Smith-Waterman score: 79; 36.170% identity (48.936% similar) in 47 aa
overlap (132-176:34-80)

CP4_EP GCRLTMGLVGVYDFDSTFIGDASLTKRPMGRVNLPLREMGVQVKSEDDGRLPVTLRGPKT
110 120 130 140 150 160
:: :: :: :: :: ::
gi|239 KYTPIFIAGILLPILLNGCSGKKAHLDPKVFPPQVEGGPTIPSPDEFGPLPLPGAGPAL
10 20 30 40 50 60
:: :: :: :: :: ::
CP4_EP PT--PITYRVPMSAQVKSALLAGLNTPGITTVIEPIINTRDHTKMLQGFGANLTVETD
170 180 190 200 210
:: :: :: :: :: ::
gi|239 PTNAPIPFVPGTAPAVSLMNMDSGLVTWMSRGAGSSSLWAYIYSDNSFGEELRNWQIMPG
70 80 90 100 110 120

>>gi|2218089|gb|AAC45442.1| cytolethal distending toxin- (258 aa)
  in1tn: 47 in1tl: 47 opt: 79 Z-score: 101.5 bits: 27.2 E(): 6.5
Smith-Waterman score: 79; 36.170% identity (48.936% similar) in 47 aa
overlap (132-176:34-80)

CP4_EP GCRLTMGLVGVYDFDSTFIGDASLTKRPMGRVNLPLREMGVQVKSEDDGRLPVTLRGPKT
110 120 130 140 150 160
:: :: :: :: :: ::
gi|221 KCTSIILIVGILLPILLNGCSSRKNRAHLDPKVFPPQVEGGPTIPSPDEFGPLPLPGAGPAL
10 20 30 40 50 60
:: :: :: :: :: ::
CP4_EP PT--PITYRVPMSAQVKSALLAGLNTPGITTVIEPIINTRDHTKMLQGFGANLTVETD
170 180 190 200 210
:: :: :: :: :: ::
gi|221 PTNAPIPFVPGTAPAVSLMNMDSGLVTWMSRGAGSSSLWAYIYSDNSFGEELRNWQIMPG
70 80 90 100 110 120

>>gi|239793101|dbj|BAH72982.1| cytolethal distending tox (258 aa)
  in1tn: 47 in1tl: 47 opt: 79 Z-score: 101.5 bits: 27.2 E(): 6.5
Smith-Waterman score: 79; 36.170% identity (48.936% similar) in 47 aa
overlap (132-176:34-80)

CP4_EP GCRLTMGLVGVYDFDSTFIGDASLTKRPMGRVNLPLREMGVQVKSEDDGRLPVTLRGPKT
110 120 130 140 150 160
:: :: :: :: :: ::
gi|239 KYTPIFIAGILLPILLNGCSGKKAHLDPKVFPPQVEGGPTIPSPDEFGPLPLPGAGPAL
10 20 30 40 50 60
:: :: :: :: :: ::
CP4_EP PT--PITYRVPMSAQVKSALLAGLNTPGITTVIEPIINTRDHTKMLQGFGANLTVETD
170 180 190 200 210
```

```
:: :: :: :: :: ::
gi|239 PTNAPIPFVPGTAPAVSLMNMDSGLVTWMSRGAGSSSLWAYIYSDNSFGEELRNWQIMPG
70 80 90 100 110 120

>>gi|239793081|dbj|BAH72967.1| cytolethal distending tox (258 aa)
  in1tn: 47 in1tl: 47 opt: 79 Z-score: 101.5 bits: 27.2 E(): 6.5
Smith-Waterman score: 79; 36.170% identity (48.936% similar) in 47 aa
overlap (132-176:34-80)

CP4_EP GCRLTMGLVGVYDFDSTFIGDASLTKRPMGRVNLPLREMGVQVKSEDDGRLPVTLRGPKT
110 120 130 140 150 160
:: :: :: :: :: ::
gi|239 KCTSIILIVGILLPILLNGCSSRKNRAHLDPKVFPPQVEGGPTIPSPDEFGPLPLPGAGPAL
10 20 30 40 50 60
:: :: :: :: :: ::
CP4_EP PT--PITYRVPMSAQVKSALLAGLNTPGITTVIEPIINTRDHTKMLQGFGANLTVETD
170 180 190 200 210
:: :: :: :: :: ::
gi|239 PTNAPIPFVPGTAPAVSLMNMDSGLVTWMSRGAGSSSLWAYIYSDNSFGEELRNWQIMPG
70 80 90 100 110 120

>>gi|239835429|dbj|BAH78127.1| cytolethal distending tox (258 aa)
  in1tn: 47 in1tl: 47 opt: 79 Z-score: 101.5 bits: 27.2 E(): 6.5
Smith-Waterman score: 79; 36.170% identity (48.936% similar) in 47 aa
overlap (132-176:34-80)

CP4_EP GCRLTMGLVGVYDFDSTFIGDASLTKRPMGRVNLPLREMGVQVKSEDDGRLPVTLRGPKT
110 120 130 140 150 160
:: :: :: :: :: ::
gi|239 KCTSIILIVGILLPILLNGCSSRKNRAHLDPKVFPPQVEGGPTIPSPDEFGPLPLPGAGPAL
10 20 30 40 50 60
:: :: :: :: :: ::
CP4_EP PT--PITYRVPMSAQVKSALLAGLNTPGITTVIEPIINTRDHTKMLQGFGANLTVETD
170 180 190 200 210
:: :: :: :: :: ::
gi|239 PTNAPIPFVPGTAPAVSLMNMDSGLVTWMSRGAGSSSLWAYIYSDNSFGEELRNWQIMPG
70 80 90 100 110 120

>>gi|1197239660|gb|ACH53456.1| cytolethal distending tox1 (134 aa)
  in1tn: 45 in1tl: 45 opt: 74 Z-score: 101.4 bits: 26.2 E(): 6.5
Smith-Waterman score: 74; 22.449% identity (59.184% similar) in 98 aa
overlap (235-327:17-113)

CP4_EP KMLQGFGANLTVETDADGVRTIRLEGRGKLTQGVIDVPGDPSSTAFFPLVAALLVPGSDVT
210 220 230 240 250 260
:: :: :: :: :: ::
gi|1197 ILAVQEAAGSPSPSTAVDTGRVIPSPGIPVRELIIWNLSNRSR--QQVY
10 20 30 40
:: :: :: :: :: ::
CP4_EP ILNVLNMPT--RTGLTILTLQEMGADIEVINPRLAGGEDVADLRVRSS---TLKGVTVTPED
270 280 290 300 310
```

```
gi|197 iYFSAVDALGGRVNLALVSNRRRADEVFLSPVROGGRPLLGIRIGNDAAFFTAHAAMRNN
50 60 70 80 90 100
: .. :...:.....: :...:.....: :...:.....: :...:.....: :...:.....:

320 330 340 350 360 370
CP4_EP RAPSMIDEYPIILAVAAAFAGATVMNGLEELRVKESDRLSAVANGKLNGVDCDEGETSL
:.....:
gi|197 DAPALVEEYVNFRRDSRDFVHQALNWMIL
110 120 130

>>gi|197239658|gb|ACH53455.1| cytolethal distending toxin (134 aa)
inithn: 45 init1: 45 opt: 74 Z-score: 101.4 bits: 26.2 E(): 6.5
Smith-Waterman score: 74; 22.449% identity (59.184% similar) in 98 aa
overlap (235-327:17-113)

210 220 230 240 250 260
CP4_EP KMLQGFAGNLTVETDADGVRTIRLEGRKLTGQVIDVPGDPSSTAFLVAALLVPGSDVT
:.....:
gi|197 ILAVQEGAGSPFSTAVDTGRVIPSPGIPVRELIWNLSNRP-QQVY
10 20 30 40

270 280 290 300 310
CP4_EP ILNVLNMPTR--RTGLILTLQEMGADIEVINPRLAGGEDVADLRVRSS--TLKGVTVPEP
: .. :...:.....: :...:.....: :...:.....: :...:.....:

gi|197 iYFSAVDALGGRVNLALVSNRRRADEVFLSPVROGGRPLLGIRIGNDAAFFTAHAAMRNN
50 60 70 80 90 100

320 330 340 350 360 370
CP4_EP RAPSMIDEYPIILAVAAAFAGATVMNGLEELRVKESDRLSAVANGKLNGVDCDEGETSL
:.....:
gi|197 DAPALVEEYVNFRRDSRDFVHQALNWMIL
110 120 130

>>gi|218349870|emb|CAQ87274.1| Cytotoxic protein [Escher (110 aa)
inithn: 39 init1: 39 opt: 72 Z-score: 100.7 bits: 25.8 E(): 7.1
Smith-Waterman score: 72; 29.787% identity (57.447% similar) in 94 aa
overlap (223-312:14-100)

200 210 220 230 240
CP4_EP VIEPIMTROHTEKMLQGFAGNLTVETDADGVRTIRLEGRGKL-----TGQVIDVPGDPSST
: .. :...:.....: :...:.....: :...:.....: :...:.....:

gi|218 MEMRTGTGEMQFKVYTYKRESRYRLFVDVQSDIIDTPG--RRM
10 20 30 40

250 260 270 280 290 300
CP4_EP AFLPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS
: .. :...:.....: :...:.....: :...:.....: :...:.....:

gi|218 VIPLASARLL--SD-KVSRELYPVVHVGD-ESWRMMTTDMASV-PVSVIGEEVADLSHRE
50 60 70 80 90

310 320 330 340 350 360
```

```
CP4_EP STLKGVTVPEDRAPSMIDEYPIILAVAAAFAGATVMNGLEELRVKESDRLSAVANGKLKN
..:
gi|218 NDIKNAINLMFWGI
100 110

>>gi|218350096|emb|CAQ87515.1| Cytotoxic protein [Escher (110 aa)
inithn: 39 init1: 39 opt: 72 Z-score: 100.7 bits: 25.8 E(): 7.1
Smith-Waterman score: 72; 29.787% identity (57.447% similar) in 94 aa
overlap (223-312:14-100)

200 210 220 230 240
CP4_EP VIEPIMTROHTEKMLQGFAGNLTVETDADGVRTIRLEGRGKL-----TGQVIDVPGDPSST
: .. :...:.....: :...:.....: :...:.....: :...:.....:

gi|218 MEMRTGTGEMQFKVYTYKRESRYRLFVDVQSDIIDTPG--RRM
10 20 30 40

250 260 270 280 290 300
CP4_EP AFLPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS
: .. :...:.....: :...:.....: :...:.....: :...:.....:

gi|218 VIPLASARLL--SD-KVSRELYPVVHVGD-ESWRMMTTDMASV-PVSVIGEEVADLSHRE
50 60 70 80 90

310 320 330 340 350 360
CP4_EP STLKGVTVPEDRAPSMIDEYPIILAVAAAFAGATVMNGLEELRVKESDRLSAVANGKLKN
..:
gi|218 NDIKNAINLMFWGI
100 110

>>gi|218359346|emb|CAU95832.1| Cytotoxic protein ccdB (P (110 aa)
inithn: 39 init1: 39 opt: 72 Z-score: 100.7 bits: 25.8 E(): 7.1
Smith-Waterman score: 72; 29.787% identity (57.447% similar) in 94 aa
overlap (223-312:14-100)

200 210 220 230 240
CP4_EP VIEPIMTROHTEKMLQGFAGNLTVETDADGVRTIRLEGRGKL-----TGQVIDVPGDPSST
: .. :...:.....: :...:.....: :...:.....: :...:.....:

gi|218 MEMRTGTGEMQFKVYTYKRESRYRLFVDVQSDIIDTPG--RRM
10 20 30 40

250 260 270 280 290 300
CP4_EP AFLPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS
: .. :...:.....: :...:.....: :...:.....: :...:.....:

gi|218 VIPLASARLL--SD-KVSRELYPVVHVGD-ESWRMMTTDMASV-PVSVIGEEVADLSHRE
50 60 70 80 90

310 320 330 340 350 360
CP4_EP STLKGVTVPEDRAPSMIDEYPIILAVAAAFAGATVMNGLEELRVKESDRLSAVANGKLKN
..:
gi|218 NDIKNAINLMFWGI
100 110
```

Year	1990	2000	2010	2020
Population (millions)	1.2	1.5	1.8	2.1
GDP (billions of dollars)	0.5	1.2	2.5	4.0
Life expectancy (years)	55	65	75	85
Urbanization (%)	20	40	60	80

```
250 260 270 280 290 300
CP4_EP AFLPLVAALVPGSDVTILNVLMNPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS
.....: : : . . . . . : : : : : : : : : : : : : : : : : : : : : : : :
gi|186 VIPLASARLL--SD-KVSRELYPVVHIGD-ESWRMMTTDMASV-PVSVIGEEVADLSHRE
40 50 60 70 80

250 260 270 280 290 300
CP4_EP STLKGVTPEDRAPSMIDEYPIILAVAAFAEGATVMNGLEELRVKESDRLSAVANGLKLN
. . .
gi|186 NDIKNAINLMFWGI
90 100

>>gi|186703047|gb|ACC91760.1| F-plasmid toxin [Cloning v (101 aa)
initn: 39 initl: 39 opt: 71 Z-score: 100.2 bits: 25.6 E(): 7.5
Smith-Waterman score: 71; 29.787% identity (56.383% similar) in 94 aa
overlap (223-312:5-91)

200 210 220 230 240
CP4_EP VIEPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRGKL----TGQVIDVPGDPSSST
: : . . . . . : : : : : : : : : : : : : : : : : : : : : : : :
gi|186 MQFKVITYKRESRYRLFVDVQSDIIDTPG--RRM
10 20 30

250 260 270 280 290 300
CP4_EP AFLPLVAALVPGSDVTILNVLMNPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS
.....: : : . . . . . : : : : : : : : : : : : : : : : : : : : : : : :
gi|186 VIPLASARLL--SD-KVSRELYPVVHIGD-ESWRMMTTDMASV-PVSVIGEEVADLSHRE
40 50 60 70 80

250 260 270 280 290 300
CP4_EP STLKGVTPEDRAPSMIDEYPIILAVAAFAEGATVMNGLEELRVKESDRLSAVANGLKLN
. . .
gi|186 NDIKNAINLMFWGI
90 100

>>gi|25988999|gb|AAN76305.1| gyrase target toxin [his-3 (101 aa)
initn: 39 initl: 39 opt: 71 Z-score: 100.2 bits: 25.6 E(): 7.5
Smith-Waterman score: 71; 29.787% identity (56.383% similar) in 94 aa
overlap (223-312:5-91)

200 210 220 230 240
CP4_EP VIEPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRGKL----TGQVIDVPGDPSSST
: : . . . . . : : : : : : : : : : : : : : : : : : : : : : : :
gi|259 MQFKVITYKRESRYRLFVDVQSDIIDTPG--RRM
10 20 30

250 260 270 280 290 300
CP4_EP AFLPLVAALVPGSDVTILNVLMNPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS
.....: : : . . . . . : : : : : : : : : : : : : : : : : : : : : : : :
gi|259 VIPLASARLL--SD-KVSRELYPVVHIGD-ESWRMMTTDMASV-PVSVIGEEVADLSHRE
```

```
40 50 60 70 80
CP4_EP STLKGVTPEDRAPSMIDEYPIILAVAAFAEGATVMNGLEELRVKESDRLSAVANGLKLN
. . .
gi|259 NDIKNAINLMFWGI
90 100

>>gi|3337026|dbj|BAA31785.1| cytotoxic protein LetB [Esc (101 aa)
initn: 39 initl: 39 opt: 71 Z-score: 100.2 bits: 25.6 E(): 7.5
Smith-Waterman score: 71; 29.787% identity (56.383% similar) in 94 aa
overlap (223-312:5-91)

200 210 220 230 240
CP4_EP VIEPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRGKL----TGQVIDVPGDPSSST
: : . . . . . : : : : : : : : : : : : : : : : : : : : : : : :
gi|333 MQFKVITYKRESRYRLFVDVQSDIIDTPG--RRM
10 20 30

250 260 270 280 290 300
CP4_EP AFLPLVAALVPGSDVTILNVLMNPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS
.....: : : . . . . . : : : : : ~ : : : : : : : : : : : : : : : : :
gi|333 VIPLASARLL--SD-KVSRELYPVVHIGD-ESWRMMTTDMASV-PVSVIGEEVADLSHRE
40 50 60 70 80

250 260 270 280 290 300
CP4_EP STLKGVTPEDRAPSMIDEYPIILAVAAFAEGATVMNGLEELRVKESDRLSAVANGLKLN
. . .
gi|333 NDIKNAINLMFWGI
90 100

>>gi|186703038|gb|ACC91753.1| F-plasmid toxin [Cloning v (101 aa)
initn: 39 initl: 39 opt: 71 Z-score: 100.2 bits: 25.6 E(): 7.5
Smith-Waterman score: 71; 29.787% identity (56.383% similar) in 94 aa
overlap (223-312:5-91)

200 210 220 230 240
CP4_EP VIEPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRGKL----TGQVIDVPGDPSSST
: : . . . . . : : : : ~ : : : : : : : : : : : : : : : : :
gi|186 MQFKVITYKRESRYRLFVDVQSDIIDTPG--RRI
10 20 30

250 260 270 280 290 300
CP4_EP AFLPLVAALVPGSDVTILNVLMNPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS
.....: : : . . . . . : : : : ~ : : : : ~ : : : : ~ : : : : ~ :
gi|186 VIPLASARLL--SD-KVSRELYPVVHIGD-ESWRMMTTDMASV-PVSVIGEEVADLSHRE
40 50 60 70 80

250 260 270 280 290 300
CP4_EP STLKGVTPEDRAPSMIDEYPIILAVAAFAEGATVMNGLEELRVKESDRLSAVANGLKLN
. . .
```

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```
gi|186 NDIKNAINLMFWGI
90 100

>>gi|52854782|gb|AAU88262.1| cytolethal distending toxin (258 aa)
  initn: 46 init1: 46 opt: 78 Z-score: 100.1 bits: 27.0 E(): 7.6
  Smith-Waterman score: 78; 36.170% identity (48.936% similar) in 47 aa
  overlap (132-176:34-80)

CP4_EP GCRLTGLVGVYDFDSTFGDASLTKRPMGRVLNPLREMGVQVKSEGDGRLFPVTLRGPKT
110 120 130 140 150 160

gi|528 KRTSIFAGVLIPILLGCGSGKNKAYLDPKVPFPQVEGGTIPSPDFGULPFGFPGAL
10 20 30 40 50 60

CP4_EP PT--PITYRVPNASQVKSAVLLAGLNTFGITTVIEPIMTROHTEKMLQGFGANLTVETD
170 180 190 200 210

gi|528 PTNAPITPVPCTAPAVSLMNMDSGLTWMSRGAGSSLWAYIYISDSNFGELRNQWIMPG
70 80 90 100 110 120

>>gi|81243901|gb|ABB64610.1| post-segregation toxin [Shi (101 aa)
  initn: 39 init1: 39 opt: 70 Z-score: 98.9 bits: 25.4 E(): 8.9
  Smith-Waterman score: 70; 28.723% identity (58.511% similar) in 94 aa
  overlap (223-312:5-91)

CP4_EP VIEPIMTRDHTHEKMLQGFGANLTVETDAGVRTIRLEGRGKL----TGVQIDVPGPSST
200 210 220 230 240

gi|812 MQFKVYAKRESRYRLFLVDVQSDIIDTPG--RRM
10 20 30

CP4_EP AFPLVAALLVPGSDVTILNVLNMPRTGLILTLQEMGADIEVINPRLAGGEDVADLRVS
250 260 270 280 290 300

gi|812 VIPLASARLL--SD-KVSRRELYPVVHVGD-ESWRMMITDMSV-PFIVIGEIVADLSHRE
40 50 60 70 80

CP4_EP STLKGVTVPEDRAPSMIDEXYPILAVAAFAEGATVMNGLEELRVKESDRLSAVANGLKLN
310 320 330 340 350 360

gi|812 NDIKNAINLMFWGI
90 100

>>gi|197239662|gb|ACH53457.1| cytolethal distending toxin (134 aa)
  initn: 45 init1: 45 opt: 72 Z-score: 98.8 bits: 25.8 E(): 9.1
  Smith-Waterman score: 72; 22.449% identity (58.163% similar) in 98 aa
  overlap (235-327:17-113)

CP4_EP KMLQGFGANLTVETDAGVRTIRLEGRGKLTVQVIDVPGDPSSTAFPLVAALLVPGSDVT
210 220 230 240 250 260
```

```
gi|197 ILLAVQEAAGSPSPSTAVDTGRVIPSPGIPVRELIWNLSNRSR--QQVY
10 20 30 40

CP4_EP ILNVLNMPRT--RTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS---TLKGVTVPED
270 280 290 300 310

gi|197 IYFSAVDALGGRVNLALVSNRRADEVFVLRPVQGGRPLLGIRIGNDAFFTAHAIAMRNN
50 60 70 80 90 100

CP4_EP RAPSMIDEXYPILAVAAFAEGATVMNGLEELRVKESDRLSAVANGLKLVGDCDEGETSL
320 330 340 350 360 370

gi|197 DAPALVEEVYNFFRDSRDPVHQALNMMIL
110 120 130

>>gi|54145467|gb|AAV31087.1| cytolethal distending toxin (154 aa)
  initn: 45 init1: 45 opt: 73 Z-score: 98.7 bits: 25.9 E(): 9.2
  Smith-Waterman score: 73; 22.449% identity (59.184% similar) in 98 aa
  overlap (235-327:41-137)

CP4_EP KMLQGFGANLTVETDAGVRTIRLEGRGKLTVQVIDVPGDPSSTAFPLVAALLVPGSDVT
210 220 230 240 250 260

gi|541 INVRQLVSGENAVDILLAVQEAAGSPSPSTAVDTGRVIPSPGIPVRELIWNLSNRSR--QQVY
20 30 40 50 60

CP4_EP ILNVLNMPRT--RTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS---TLKGVTVPED
270 280 290 300 310

gi|541 IYFSAVDALGGRVNLALVSNRRADEVFVLRPVQGGRPLLGIRIGNDAFFTAHAIAMRNN
70 80 90 100 110 120

CP4_EP RAPSMIDEXYPILAVAAFAEGATVMNGLEELRVKESDRLSAVANGLKLVGDCDEGETSL
320 330 340 350 360 370

gi|541 DAPALVEEVYSFFRDSRDPVHQALN
130 140 150

>>gi|54145471|gb|AAV31089.1| cytolethal distending toxin (154 aa)
  initn: 45 init1: 45 opt: 73 Z-score: 98.7 bits: 25.9 E(): 9.2
  Smith-Waterman score: 73; 22.449% identity (59.184% similar) in 98 aa
  overlap (235-327:41-137)

CP4_EP ILNVLNMPRT--RTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS---TLKGVTVPED
270 280 290 300 310

gi|541 INVRQLVSGENAVDILLAVQEAAGSPSPSTAVDTGRVIPSPGIPVRELIWNLSNRSR--QQVY
20 30 40 50 60
```

```

CP4_EF_RAPSWMIDEPYTLAVAAAFAGATVMNGLEELRVKESDRLSAVANGKLNKGVCDCGETSL
:: ...
gi|541|DAPELVEEVYSFRRSDRDPVHQALN
130 140 150
>>>gi|58045080|gb|AAW64850.1| post-segregation toxin [Shi (108 aa)
initn: 39 init1: 39 opt: 70 Z-score: 98.3 bits: 25.3 E(): 9.7
Smith-Waterman score: 70; 28.723% identity (58.511% similar) in 94 aa
overlap (223-312:12-98)
200 210 220 230 240
CP4_EF_VIEPIMTRDHTKMLQGFANLTVETDAGVTRIRLEGRGKL---TCQVIDVPGFSSST
: . . . . . : . . . . . :
gi|580|MRTGTGMQFKVYAYKRESRYRLFVDVQSDIIDTFEG--RRM
10 20 30
250 260 270 280 290 300
CP4_EF_AFPFLVAALLVPGSDVTILNLMNPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVS
: . . . . . : . . . . . : . . . . . :
gi|580|VIPLASARLL--SD-KVSRELYPVVHVGD-ESWRMTTDMASV-PIFVIGEEDVADLSHRE
40 50 60 70 80 90
310 320 330 340 350 360
CP4_EF_STLKGVTVPEDRAPSMIDEXPIILAVAAAFAGATVMNGLEELRVKESDRLSAVANGKLN
. . .
gi|580|NDIKNAINLMFWGI
100
>>>gi|56383108|gb|AAL72356.2| post-segregation toxin [Shi (108 aa)
initn: 39 init1: 39 opt: 70 Z-score: 98.3 bits: 25.3 E(): 9.7
Smith-Waterman score: 70; 28.723% identity (58.511% similar) in 94 aa
overlap (223-312:12-98)
200 210 220 230 240
CP4_EF_VIEPIMTRDHTKMLQGFANLTVETDAGVTRIRLEGRGKL---TCQVIDVPGFSSST
: . . . . . : . . . . . :
gi|563|MRTGTGMQFKVYAYKRESRYRLFVDVQSDIIDTFEG--RRM
10 20 30
250 260 270 280 290 300
CP4_EF_AFPFLVAALLVPGSDVTILNLMNPTRTGLILTLQEMGADIEVINPRLAGGEDVADLRVS
: . . . . . : . . . . . : . . . . . :
gi|563|VIPLASARLL--SD-KVSRELYPVVHVGD-ESWRMTTDMASV-PIFVIGEEDVADLSHRE
40 50 60 70 80 90
310 320 330 340 350 360
CP4_EF_STLKGVTVPEDRAPSMIDEXPIILAVAAAFAGATVMNGLEELRVKESDRLSAVANGKLN
. . .
gi|563|NDIKNAINLMFWGI
100

```



```
>>gi|181248277|gb|ABB68984.1| post-segregation toxin [Shi (108 aa)
  initn: 39 initl: 39 opt: 70 Z-score: 98.3 bits: 25.3 E(): 9.7
  Smith-Waterman score: 70; 28.723% identity (58.511% similar) in 94 aa
  overlap (223-312:12-98)

      200      210      220      230      240
CP4_EP VIEPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRGKL---TGQVIDVPGDPSST
gi|1812      : . . . . . : . . . . . : . . . . . : . . . . . :
      10      20      30
MRTGTGEMQFKVYAYKRESRYRLFVDVQSDIIDTPG--RRM

      250      260      270      280      290      300
CP4_EP AFLVAALIVPGSDVTILNVLNMPRTTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS
gi|1812 VIPLASARLL--SD-KVSRELYPVVHVGD-ESWRMTTDMASV-PFIVIGEEVADLSHRE
      40      50      60      70      80      90

      310      320      330      340      350      360
CP4_EP STLKGVTVPEDRAPSMIDEYPTILAVAAAFAGATVMNGLEELRVKESDRLSAVANGLKLN
      . . .
gi|1812 NDIKNAINLMFWGI
      100

>>gi|13310719|gb|AAK18543.1|AF348706_232 post-segregatio (110 aa)
  initn: 39 initl: 39 opt: 70 Z-score: 98.1 bits: 25.3 E(): 9.9
  Smith-Waterman score: 70; 28.723% identity (58.511% similar) in 94 aa
  overlap (223-312:14-100)

      200      210      220      230      240
CP4_EP VIEPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRGKL---TGQVIDVPGDPSST
gi|133      : . . . . . : . . . . . : . . . . . : . . . . . :
      10      20      30      40
MPMRTGTGEMQFKVYAYKRESRYRLFVDVQSDIIDTPG--RRM

      250      260      270      280      290      300
CP4_EP AFLVAALIVPGSDVTILNVLNMPRTTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS
gi|133      : . . . . . : . . . . . : . . . . . : . . . . . :
      50      60      70      80      90
VIPLASARLL--SD-KVSRELYPVVHVGD-ESWRMTTDMASV-PFIVIGEEVADLSHRE

      310      320      330      340      350      360
CP4_EP STLKGVTVPEDRAPSMIDEYPTILAVAAAFAGATVMNGLEELRVKESDRLSAVANGLKLN
      . . .
gi|133 NDIKNAINLMFWGI
      100

>>gi|18654301|gb|AAL77581.1|L47837_1 cytotoxic protein [ (126 aa)
  initn: 39 initl: 39 opt: 71 Z-score: 98.1 bits: 25.5 E(): 10
  Smith-Waterman score: 71; 29.787% identity (56.383% similar) in 94 aa
  overlap (223-312:30-116)
```

```
      200      210      220      230      240
CP4_EP VIEPIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRGKL---TGQVIDVPGDPSST
gi|186      : . . . . . : . . . . . : . . . . . : . . . . . :
      10      20      30      40      50
MTMITPSLHACKRSTLEDPVPSSNSLQFKVYTKRESRYRLFVDVQSDIIDTPG--RRM

      250      260      270      280      290      300
CP4_EP AFLVAALIVPGSDVTILNVLNMPRTTGLILTLQEMGADIEVINPRLAGGEDVADLRVRS
gi|186      : . . . . . : . . . . . : . . . . . : . . . . . :
      60      70      80      90      100      110
VIPLASARLL--SD-KVSRELYPVVHIGD-ESWRMTTDMASV-PVSVIGEEVADLSHRE

      310      320      330      340      350      360
CP4_EP STLKGVTVPEDRAPSMIDEYPTILAVAAAFAGATVMNGLEELRVKESDRLSAVANGLKLN
      . . .
gi|186 NDIKNAINLMFWGI
      120

455 residues in 1 query sequences
2069351 residues in 8448 library sequences
Scomplib [34t26]
start: Fri Jan 22 19:50:55 2010 done: Fri Jan 22 19:50:56 2010
Total Scan time: 0.300 Total Display time: 0.040

Function used was FASTA [version 3.4t26 July 7, 2006]

# fasta34 CP4_EPSPS.pep /genedata/1/db/PRT_2010 -Q -E 1 -O
CP4_EPSPS.pep_ptt.fasta
FASTA searches a protein or DNA sequence data bank version 3.4t26 July 7,
2006
Please cite:
W.R. Pearson & D.J. Lipman PNAS (1988) 85:2444-2448

CP4_EPSPS, 455 aa
vs /genedata/1/db/PRT_2010 library

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< 20 281432 0:=====
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  24 859 17:*
  26 2560 374:*
  28 9356 4037:*
  30 33052 24526:*
  32 98385 94834:==*
  34 238098 257179:=====*
  36 500393 528185:=====*
  38 837541 872893:=====*
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40 1223914 1217609:=====*
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42 1479515 1488379:=====*
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44 1608426
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1641821:=====*
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>120 9241 324:=====*
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4761287459 residues in 17815538 sequences
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statistics sampled from 60000 to 17802282 sequences
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Expectation_n fit: rho(ln(x))= 5.99400.000185; mu= 7.2282 0.010
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Lambda= 0.144056
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Kolmogorov-Smirnov statistic: 0.0165 (N=29) at 88
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FASTA (3.5 Sept 2006) function [optimized, BL50 matrix (15:-5)] ktup: 2
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join: 37, opt: 25, open/ext: -10/-2, width: 16
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The best scores are:
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173
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173
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173
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gi|227343087|gb|ACP27305.1| 3-phosphoshikimate 1-c ( 448) 2670 564.3 5e-158
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144
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Regulatory Product Characterization Center

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gi 151559264 gb ABS12762.1 3-phosphoshikimate 1-c (450) 2441 516.7 1.1e-143	gi 1260669423 gb EE56363.1 5-enolpyruvylshikimate (450) 2413 510.9 6e-142
gi 1221721755 gb ACM24911.1 3-phosphoshikimate 1-c (454) 2427 513.8 8.1e-143	gi 189018862 gb ACD71584.1 3-phosphoshikimate 1-c (450) 2413 510.9 6e-142
gi 264661798 gb EE232059.1 3-phosphoshikimate 1-c (450) 2424 513.1 1.2e-142	gi 82615053 emb CAU09979.1 ATP/GTP-binding site m (450) 2413 510.9 6e-142
gi 1613334826 gb ABX61131.1 3-phosphoshikimate 1-c (450) 2423 512.9 1.4e-142	gi 260096414 gb EEW80290.1 5-enolpyruvyl shikimat (461) 2413 510.9 6.1e-142
gi 260156845 gb EEW91925.1 3-phosphoshikimate 1-c (450) 2423 512.9 1.4e-142	gi 148370906 gb AB060885.1 3-phosphoshikimate 1-c (461) 2409 510.0 1.1e-141
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gi 261293812 gb EEY97308.1 3-phosphoshikimate 1-c (450) 2419 512.1 2.5e-142	gi 13487156 gb AAK27445.1 AF326475_1 5-enolpyruvyl (480) 2389 505.9 2e-140
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gi 17983963 gb AAL53098.1 3-phosphoshikimate 1-ca (480) 2414 511.1 5.5e-142	gi 191681127 gb ABE37429.1 3-phosphoshikimate 1-ca (445) 1653 352.9 2.1e-94
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gi 260874433 gb EE81502.1 3-phosphoshikimate 1-c (450) 2413 510.9 6e-142	gi 168198858 gb ACA20805.1 3-phosphoshikimate 1-c (449) 1642 350.6 1e-93
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	gi 170658506 gb AC827561.1 3-phosphoshikimate 1-c (449) 1639 350.0 1.6e-93
	gi 254268596 emb CAX24555.1 3-enolpyruvylshikimat (436) 1638 349.8 1.8e-93
	gi 39652766 emb CAE25505.1 3-phosphoshikimate 1-c (445) 1632 348.5 4.3e-93
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gi 167293964 gb ABZ46828.1 Sequence 20766 from pa (430) 1606 343.1 1.8e-91	gi 1254040135 gb ACT56931.1 3-phosphoshikimate 1-c (449) 1479 316.7 1.6e-83
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gi 190103938 gb ABD85975.1 3-phosphoshikimate 1-ca (467) 1595 340.9 9.3e-91	gi 196187174 gb EDX82150.1 3-phosphoshikimate 1-c (436) 1465 313.8 1.2e-82
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gi 120959239 gb ACT199875.1 3-phosphoshikimate 1-c (448) 1589 339.6 2.1e-90	gi 134345709 gb EBA71436.1 hypothetical protein G (478) 1453 311.4 7.3e-82
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gi 156544266 gb AAV90420.1 5-enolpyruvylshikimate- (453) 1584 338.6 4.4e-90	gi 161787807 emb CAP57405.1 3-phosphoshikimate 1- (449) 1452 311.1 8e-82
gi 18862748 gb ABD53625.1 3-phosphoshikimate 1-ca (450) 1583 338.4 5.1e-90	gi 1142778383 gb EDA51368.1 hypothetical protein G (450) 1449 310.5 1.2e-81
gi 2604213861 gb EEX14637.1 3-phosphoshikimate 1-c (442) 1582 338.1 5.8e-90	gi 143036643 gb EDC35022.1 hypothetical protein G (423) 1447 310.1 1.6e-81
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gi 1255105080 gb EET47754.1 3-phosphoshikimate 1-c (496) 1563 334.6 7.4e-89	gi 136794870 gb EBT78571.1 3-phosphoshikimate 1-c (439) 1376 295.3 4.4e-77
gi 217502178 gb ACK49587.1 3-phosphoshikimate 1-c (443) 1564 334.4 7.8e-89	gi 1422272889 gb ECW55072.1 hypothetical protein G (420) 1369 293.9 1.2e-76
gi 15680491 gb AAV97156.1 3-phosphoshikimate 1-ca (448) 1562 334.4 7.8e-89	gi 135799022 gb EBY91601.1 hypothetical protein G (412) 1362 292.4 3.2e-76
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gi 167281012 gb ABZ33876.1 Sequence 7814 from pat (418) 1549 331.3 6.4e-88	gi 136763878 gb EBQ26143.1 hypothetical protein G (423) 1351 290.1 1.6e-75
gi 1260414998 gb EEX08257.1 3-phosphoshikimate 1-c (448) 1548 331.1 7.8e-88	gi 142122134 gb ECY75183.1 hypothetical protein G (406) 1339 287.6 8.6e-75
gi 125663297 dbj BAI01266.1 3-phosphoshikimate 1- (466) 1538 329.0 3.4e-87	gi 135334376 gb EBG94098.1 hypothetical protein G (446) 1331 286.0 2.9e-74
gi 1256632240 dbj BAH98215.1 3-phosphoshikimate 1- (466) 1538 329.0 3.4e-87	gi 143470309 gb EDF15730.1 hypothetical protein G (362) 1325 284.7 5.8e-74
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gi 157911331 gb ABV92764.1 3-phosphoshikimate 1-c (450) 1536 328.6 4.4e-87	gi 144019737 gb EDJ28838.1 hypothetical protein G (748) 1296 278.8 7.1e-72
gi 1206686690 gb EDZ47172.1 3-phosphoshikimate 1-c (448) 1534 328.2 5.9e-87	gi 144221151 gb EDJ74707.1 hypothetical protein G (439) 1291 277.7 9.2e-72
gi 198253480 gb EDY77794.1 3-phosphoshikimate 1-c (469) 1530 327.3 1.1e-86	gi 177384298 gb ABA75811.1 putative bifunctional p (735) 1292 278.0 1.2e-71
gi 144125505 gb EDJ04872.1 hypothetical protein G (515) 1530 327.4 1.2e-86	gi 150959179 gb ABR81204.1 prephenate dehydrogena (746) 1292 278.0 1.3e-71
gi 1206679873 gb EDZ44360.1 3-phosphoshikimate 1-c (441) 1525 326.3 2.1e-86	gi 143774157 gb EDG71670.1 hypothetical protein G (477) 1288 277.1 1.5e-71
gi 198261936 gb EDY93406.1 3-phosphoshikimate 1-c (450) 1521 325.5 3.9e-86	gi 142247445 gb ECW69575.1 hypothetical protein G (400) 1283 276.0 2.7e-71
gi 214045586 gb EEB86224.1 3-phosphoshikimate 1-c (450) 1520 325.3 4.4e-86	gi 136201992 gb EBM56643.1 hypothetical protein G (477) 1283 276.0 3.1e-71
gi 158001482 gb AAW60376.1 3-Phosphoshikimate 1-ca (442) 1515 324.2 9e-86	gi 184787408 gb ABC63590.1 5-enolpyruvylshikimate- (463) 1280 275.4 4.7e-71
gi 146400733 gb ABQ29260.1 3-phosphoshikimate 1-c (445) 1514 324.0 1e-85	gi 1228385087 gb ACQ29040.1 Sequence 21554 from pa (782) 1283 276.1 4.8e-71
gi 136727461 gb EBQ00749.1 hypothetical protein G (459) 1498 320.7 1.1e-84	

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gi 1218770867 emb CAW26632.1 still frameshift 3-PH	(746)	1282	275.9	5.3e-71	gi 194349115 gb ACF552238.1 3-phosphoshikimate 1-c	(435)	1235	266.0	2.9e-68
gi 167283172 gb ABZ36036.1 Sequence 9974 from pat	(411)	1278	275.0	5.7e-71	gi 142142726 gb ECY90367.1 hypohetical protein G	(524)	1235	266.1	3.4e-68
gi 237685422 gb ACR12686.1 response regulator rec	(742)	1281	275.7	6.1e-71	gi 183635703 gb ABC1670.1 3-phosphoshikimate 1-ca	(738)	1237	266.5	3.5e-68
gi 1261912912 emb CAQ46544.1 putative 3-phosphoshi	(746)	1281	275.7	6.2e-71	gi 190012912 emb CAQ46544.1 putative 3-phosphoshi	(435)	1232	265.4	4.5e-68
gi 254043237 gb ACT60032.1 3-phosphoshikimate 1-c	(438)	1276	274.5	8e-71	gi 1422215066 gb ECW45518.1 hypohetical protein G	(602)	1233	265.7	5.2e-68
gi 145575084 gb ABH84616.1 3-phosphoshikimate 1-c	(746)	1279	275.3	8.2e-71	gi 1422454573 gb ECY19775.1 hypohetical protein G	(736)	1234	265.9	5.3e-68
gi 262315671 gb EEY96710.1 3-phosphoshikimate 1-c	(749)	1278	275.1	9.5e-71	gi 1224463889 gb EEF80156.1 3-phosphoshikimate 1-c	(439)	1230	265.0	6.1e-68
gi 260406041 gb EEW99527.1 5-enolpyruvylshikimate	(756)	1278	275.1	9.6e-71	gi 50404063 gb AAT76791.1 5-enolpyruvylshikimate-	(449)	1227	264.4	9.5e-68
gi 115586374 gb ABU12389.1 EPSP synthase/prephena	(746)	1277	274.9	1.1e-70	gi 1219718621 gb EED37146.1 3-phosphoshikimate 1-c	(435)	1224	263.7	1.4e-67
gi 135021201 gb EEB98359.1 hypohetical protein G	(431)	1273	273.9	1.2e-70	gi 143927391 gb EDH63433.1 hypohetical protein G	(433)	1219	262.7	2.9e-67
gi 143034105 gb EDC33172.1 hypohetical protein G	(433)	1273	273.9	1.2e-70	gi 167288581 gb ABZ41445.1 Sequence 15383 from pa	(442)	1219	262.7	3e-67
gi 169151779 emb CAP00598.1 bifunctional protein	(748)	1274	274.2	1.7e-70	gi 167733824 emb CAP52030.1 3-phosphoshikimate 1-	(438)	1218	262.5	3.4e-67
gi 262309719 gb EEY90849.1 3-phosphoshikimate 1-c	(748)	1274	274.2	1.7e-70	gi 1136454660 gb EBO27076.1 hypohetical protein G	(440)	1216	262.1	4.6e-67
gi 169148265 emb CAM86130.1 bifunctional protein	(748)	1274	274.2	1.7e-70	gi 1826332076 gb ACB92852.1 3-phosphoshikimate 1-c	(442)	1216	262.1	4.6e-67
gi 261836400 gb ACX96167.1 3-phosphoshikimate 1-c	(456)	1271	273.5	1.7e-70	gi 128057346 gb AAO29203.1 3-phosphoshikimate 1-ca	(454)	1216	262.1	4.7e-67
gi 213985849 gb ACU56148.1 3-phosphoshikimate 1-c	(756)	1274	274.2	1.7e-70	gi 142716963 gb EDA06672.1 hypohetical protein G	(467)	1215	261.9	5.5e-67
gi 213057836 gb ACU42738.1 hypohetical protein A	(756)	1274	274.2	1.7e-70	gi 110647719 emb CAL17195.1 prephenate dehydrogen	(760)	1216	262.2	7.3e-67
gi 262258779 gb EEY77512.1 3-phosphoshikimate 1-c	(756)	1274	274.2	1.7e-70	gi 167965401 gb ACAL2411.1 3-phosphoshikimate 1-c	(442)	1208	260.4	1.4e-66
gi 193077824 gb ABO12699.2 hypohetical protein A	(756)	1274	274.2	1.7e-70	gi 126168057 gb EAX5368.1 3-phosphoshikimate 1-c	(747)	1210	260.9	1.7e-66
gi 260410993 gb EEEX04290.1 3-phosphoshikimate 1-c	(756)	1274	274.2	1.7e-70	gi 166574282 gb AAAY49692.1 3-phosphoshikimate 1-ca	(438)	1204	259.6	2.6e-66
gi 143454605 gb EDF05664.1 hypohetical protein G	(437)	1270	273.3	1.9e-70	gi 121112672 gb AAM40886.1 3-phosphoshikimate 1-ca	(438)	1204	259.6	2.6e-66
gi 78363826 gb ABBA1791.1 3-phosphoshikimate 1-ca	(445)	1270	273.3	1.9e-70	gi 19107493 gb AAF85123.1 AE004043_7 3-phosphoshiki	(454)	1198	258.3	6.3e-66
gi 193210388 gb ACC57786.1 5-enolpyruvylshikimate	(756)	1273	274.0	2e-70	gi 167290928 gb ABZ43792.1 Sequence 17730 from pa	(454)	1198	258.3	6.3e-66
gi 53758016 gb AAU92307.1 3-phosphoshikimate 1-ca	(422)	1269	273.1	2.1e-70	gi 198247672 gb ACH83265.1 3-phosphoshikimate 1-c	(433)	1196	257.9	8e-66
gi 160878077 gb ABX52003.1 G6 (synthetic construc	(507)	1269	273.2	2.1e-70	gi 1218517584 gb ACK78170.1 3-phosphoshikimate 1-c	(433)	1196	257.9	8e-66
gi 219678890 gb EED35239.1 3-phosphoshikimate 1-c	(433)	1267	272.7	2.9e-70	gi 78035677 emb CAU23368.1 3-phosphoshikimate 1-c	(440)	1196	257.9	8.1e-66
gi 148513208 gb ABQ80068.1 3-phosphoshikimate 1-c	(746)	1270	273.4	3e-70	gi 21107840 gb AAM36518.1 3-phosphoshikimate 1-ca	(440)	1194	257.5	1.1e-65
gi 169758566 gb ACA71882.1 3-phosphoshikimate 1-c	(746)	1268	273.0	4e-70	gi 142681983 gb AAS28448.1 Sequence 3590 from pate	(773)	1196	258.0	1.3e-65
gi 33703074 gb AAQ27549.1 Sequence 4521 from pate	(758)	1268	273.0	4.1e-70	gi 1222440562 gb EEB47241.1 EPSP synthase (3-phosp	(289)	1189	256.4	1.5e-65
gi 68345959 gb AA933565.1 prephenate dehydrogenas	(741)	1267	272.8	4.6e-70	gi 167282500 gb ABZ35364.1 Sequence 9302 from pat	(408)	1191	256.9	1.6e-65
gi 142060811 gb ECV26044.1 hypohetical protein G	(437)	1263	271.8	5.2e-70	gi 1672888949 gb ABZ41813.1 Sequence 15751 from pa	(412)	1191	256.7	1.8e-65
gi 166858861 gb ABY97268.1 3-phosphoshikimate 1-c	(746)	1265	272.4	6.2e-70	gi 1672889333 gb ABZ42197.1 Sequence 16135 from pa	(408)	1190	256.7	1.8e-65
gi 136410014 gb EEN98241.1 hypohetical protein G	(445)	1261	271.4	7e-70	gi 148280723 gb ABQ54811.1 3-phosphoshikimate 1-c	(433)	1189	256.5	2.2e-65
gi 124983266 gb AAN67390.1 AE016365_5 prephenate de	(746)	1264	272.2	7.1e-70	gi 1218306685 emb CAU98758.1 unnamed protein produ	(435)	1189	256.5	2.2e-65
gi 195109658 emb CAK14359.1 putative prephenate de	(746)	1264	272.2	7.1e-70	gi 526287601 gb AAU27501.1 3-phosphoshikimate 1-ca	(433)	1187	256.0	2.9e-65
gi 219996023 gb ACL72625.1 3-phosphoshikimate 1-c	(441)	1256	270.4	1.4e-69	gi 142559088 gb ECY95157.1 hypohetical protein G	(431)	1185	255.6	3.9e-65
gi 262312455 gb EEY93340.1 conserved hypohetical	(749)	1259	271.1	1.5e-69	gi 1433558135 gb EDE53806.1 hypohetical protein G	(467)	1185	255.6	4.2e-65
gi 191797377 gb ABE59516.1 3-phosphoshikimate 1-ca	(750)	1259	271.1	1.5e-69	gi 92393712 gb ABE74987.1 prephenate dehydrogenas	(780)	1188	256.4	4.2e-65
gi 143443468 gb EDE98739.1 hypohetical protein G	(422)	1255	270.2	1.6e-69	gi 1188520832 gb ACD58777.1 3-phosphoshikimate 1-c	(440)	1184	255.4	4.6e-65
gi 148572136 gb ABQ94195.1 3-phosphoshikimate 1-c	(770)	1256	270.5	2.3e-69	gi 58426603 gb AAW75640.1 3-phosphoshikimate 1-ca	(440)	1184	255.4	4.6e-65
gi 143957288 gb EDH84919.1 hypohetical protein G	(499)	1250	269.2	3.8e-69	gi 84367863 dbj BAE69021.1 3-phosphoshikimate 1-c	(440)	1184	255.4	4.6e-65
gi 121588771 gb ABM61351.1 3-phosphoshikimate 1-c	(444)	1246	268.3	6.1e-69	gi 1214037923 gb EEB78587.1 3-phosphoshikimate 1-c	(434)	1182	255.0	6e-65
gi 135102048 gb EBF50494.1 hypohetical protein G	(383)	1244	267.9	7.2e-69	gi 537541371 emb CAH15610.1 3-phosphoshikimate 1-c	(433)	1180	254.6	8e-65
gi 142617034 gb ECZ35624.1 hypohetical protein G	(402)	1243	267.7	8.6e-69	gi 53751114 emb CAH12525.1 3-phosphoshikimate 1-c	(433)	1176	253.8	1.4e-64
gi 89951391 gb ABD81406.1 prephenate dehydrogenas	(745)	1246	268.4	9.5e-69	gi 56686249 dbj BAD79471.1 3-phosphoshikimate 1-c	(448)	1165	251.5	7.2e-64
gi 262299019 gb EEY86932.1 3-phosphoshikimate 1-c	(748)	1246	268.4	9.2e-69	gi 181167924 gb ABBS6264.1 3-phosphoshikimate 1-ca	(448)	1165	251.5	7.2e-64
gi 14570888 gb ABF79994.1 3-phosphoshikimate 1-c	(706)	1244	268.0	1.1e-68	gi 142228751 gb ECW55704.1 hypohetical protein G	(363)	1162	250.8	9.2e-64
gi 49531306 emb CAG69018.1 bifunctional protein [(748)	1244	268.0	1.3e-68	gi 147850559 emb CAK28053.1 3-phosphoshikimate 1-	(437)	1160	250.4	1.4e-63
gi 142461568 gb ECY24891.1 hypohetical protein G	(433)	1238	266.6	1.9e-68	gi 166086651 dbj BAG01359.1 3-phosphoshikimate 1-	(446)	1160	250.4	1.5e-63
gi 229361034 emb CAY47896.1 putative bifunctional	(748)	1240	267.2	2.3e-68	gi 71038727 gb AAZ19035.1 3-phosphoshikimate 1-ca	(778)	1163	251.2	1.5e-63
gi 219677398 gb EED33763.1 3-phosphoshikimate 1-c	(436)	1236	266.2	2.5e-68					

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gi 147847907 emb CAK23458.1 3-phosphoshikimate 1-	(439)	1157	249.8	2.2e-63	gi 1257777792 gb ACV61486.1 3-phosphoshikimate 1-c	(429)	1105	239.0	3.9e-60
gi 1598844701 gb ACA98183.1 3-phosphoshikimate 1-c	(446)	1157	249.8	2.3e-63	gi 1142097092 gb ECV564446.1 hypothetical protein G	(434)	1105	239.0	4e-60
gi 159028618 emb CAO90621.1 aroA [Microcystis aer	(446)	1157	249.8	2.3e-63	gi 146326549 dbj BAF61692.1 3-phosphoshikimate 1-	(435)	1105	239.0	4e-60
gi 144149402 gb EDU22378.1 hypothetical protein G	(451)	1155	249.4	3.1e-63	gi 167294115 gb ABZ46979.1 Sequence 20917 from pa	(424)	1094	236.7	1.9e-59
gi 781971121 gb ABB34886.1 3-phosphoshikimate 1-ca	(441)	1154	249.2	3.5e-63	gi 161762125 gb ABX7767.1 3-phosphoshikimate 1-c	(438)	1093	236.5	2.3e-59
gi 1218173786 gb ACK72519.1 3-phosphoshikimate 1-c	(448)	1154	249.2	3.5e-63	gi 154355047 gb ABST76509.1 3-phosphoshikimate 1-c	(438)	1091	236.1	3e-59
gi 142376209 gb ECX62405.1 hypothetical protein G	(456)	1154	249.2	3.6e-63	gi 1219863318 gb ACU48357.1 3-phosphoshikimate 1-c	(451)	1090	235.9	3.6e-59
gi 143267007 gb EDE01582.1 hypothetical protein G	(382)	1150	248.3	5.4e-63	gi 169803915 gb ACA82553.1 3-phosphoshikimate 1-c	(431)	1089	235.7	3.9e-59
gi 1653564 dbj JBA118477.1 3-phosphoshikimate 1-ca	(447)	1149	248.2	7.2e-63	gi 135045054 gb EBF14105.1 hypothetical protein G	(439)	1089	235.7	4e-59
gi 12484184 gb AAB72320.1 I149213 Sequence 67 from p	(447)	1149	248.2	7.2e-63	gi 144072878 gb ED167260.1 hypothetical protein G	(416)	1085	234.8	6.8e-59
gi 167275962 gb ABZ28826.1 Sequence 2764 from pat	(447)	1149	248.2	7.2e-63	gi 185773124 gb ABC79961.1 3-phosphoshikimate 1-ca	(440)	1083	234.4	9.5e-59
gi 5957584 gb AAE08258.1 Sequence 67 from patent	(447)	1149	248.2	7.2e-63	gi 177996387 gb ABBI5286.1 3-phosphoshikimate 1-ca	(428)	1081	234.0	1.2e-58
gi 5159361 emb CAA53074.1 3-phosphoshikimate 1-car	(447)	1149	248.2	7.2e-63	gi 169638186 gb ACA59692.1 3-phosphoshikimate 1-c	(429)	1081	234.0	1.2e-58
gi 2485261 gb AAB73397.1 I14486 Sequence 67 from p	(447)	1149	248.2	7.2e-63	gi 143958022 gb EDH85453.1 hypothetical protein G	(441)	1080	233.8	1.5e-58
gi 144974763 gb ABP12474.1 Sequence 67 from patent	(447)	1149	248.2	7.2e-63	gi 143018092 gb EDC21594.1 hypothetical protein G	(322)	1077	233.1	1.7e-58
gi 219993190 gb ACU69793.1 3-phosphoshikimate 1-c	(430)	1142	246.7	1.9e-62	gi 1143627605 gb EDF39441.1 hypothetical protein G	(436)	1078	233.4	1.9e-58
gi 135895733 gb EBK54414.1 hypothetical protein G	(435)	1142	246.7	1.9e-62	gi 135065714 gb EBR27273.1 hypothetical protein G	(517)	1079	233.6	2e-58
gi 78169193 gb ABB26290.1 3-phosphoshikimate 1-ca	(437)	1142	246.7	1.9e-62	gi 143847787 gb EDH06009.1 hypothetical protein G	(446)	1075	232.8	3.1e-58
gi 167287132 gb ABX39996.1 Sequence 13934 from pa	(675)	1143	247.0	2.4e-62	gi 166854307 gb ABY92716.1 3-phosphoshikimate 1-c	(423)	1074	232.6	3.4e-58
gi 260414082 gb EEK07378.1 3-phosphoshikimate 1-c	(441)	1139	246.1	3e-62	gi 166856233 gb ABY94641.1 3-phosphoshikimate 1-c	(423)	1074	232.6	3.4e-58
gi 855753421 gb ABD02239.1 3-phosphoshikimate 1-ca	(434)	1138	245.9	3.4e-62	gi 141843988 gb EC764267.1 hypothetical protein G	(327)	1071	231.9	4.2e-58
gi 1716981501 gb ACB51131.1 3-phosphoshikimate 1-c	(451)	1136	245.5	4.7e-62	gi 118567567 gb ABU02372.1 3-phosphoshikimate 1-c	(435)	1071	231.9	5.3e-58
gi 269468607 gb EEZ80251.1 5-enolpyruvylshikimate	(434)	1134	245.0	6.1e-62	gi 136626616 gb EBP36954.1 hypothetical protein G	(349)	1069	231.5	5.9e-58
gi 85555472 gb ABD00430.1 3-phosphoshikimate 1-ca	(444)	1131	244.4	9.5e-62	gi 122777464 dbj BAC13736.1 5-enolpyruvylshikimate	(429)	1070	231.7	6.1e-58
gi 144061985 gb ED159285.1 hypothetical protein G	(451)	1131	244.4	9.7e-62	gi 1260865161 gb ACX52267.1 3-phosphoshikimate 1-c	(434)	1070	231.7	6.1e-58
gi 143772965 gb EDG71093.1 hypothetical protein G	(441)	1130	244.2	1.1e-61	gi 1219953181 gb ACU63565.1 3-phosphoshikimate 1-c	(440)	1070	231.7	6.2e-58
gi 135056108 gb EBF21159.1 hypothetical protein G	(458)	1130	244.2	1.1e-61	gi 136112196 gb EBU99481.1 hypothetical protein G	(353)	1067	231.1	7.9e-58
gi 135831629 gb EBK12121.1 hypothetical protein G	(339)	1128	243.0	1.2e-61	gi 1203160241 gb AAM24270.1 5-enolpyruvylshikimate-	(423)	1067	231.1	9.2e-58
gi 146274052 dbj BAF59801.1 5-enolpyruvylshikimat	(431)	1129	244.7	1.2e-61	gi 160360305 gb ABX31919.1 3-phosphoshikimate 1-c	(432)	1067	231.1	9.4e-58
gi 125645909 gb ACO04095.1 3-phosphoshikimate 1-c	(432)	1127	243.6	1.7e-61	gi 142941726 gb EDB67886.1 hypothetical protein G	(446)	1067	231.1	9.7e-58
gi 1256589111 gb ACU99997.1 3-phosphoshikimate 1-c	(448)	1127	243.6	1.7e-61	gi 1261374423 gb ACX77166.1 3-phosphoshikimate 1-c	(427)	1066	230.9	1.1e-57
gi 1225645623 gb ACN98673.1 3-phosphoshikimate 1-c	(431)	1125	243.2	2.2e-61	gi 352111601 dbj BAC88979.1 3-phosphoshikimate 1-c	(432)	1066	230.9	1.1e-57
gi 158305702 gb ABW27319.1 3-phosphoshikimate 1-c	(446)	1123	242.8	3e-61	gi 1223698046 gb ACN18589.1 3-phosphoshikimate 1-c	(428)	1065	230.7	1.2e-57
gi 1218166375 gb ACK65112.1 3-phosphoshikimate 1-c	(431)	1122	242.5	3.4e-61	gi 1223698186 gb ACN18694.1 3-phosphoshikimate 1-c	(428)	1065	230.7	1.2e-57
gi 138931025 gb ACD65655.1 3-phosphoshikimate 1-c	(431)	1122	242.5	3.4e-61	gi 1223697750 gb ACN18367.1 3-phosphoshikimate 1-c	(428)	1065	230.7	1.2e-57
gi 142682488 gb ECZ81982.1 hypothetical protein G	(441)	1121	242.3	4e-61	gi 1223698218 gb ACN18718.1 3-phosphoshikimate 1-c	(428)	1065	230.7	1.2e-57
gi 142815727 gb EDX79221.1 hypothetical protein G	(419)	1119	241.9	5.1e-61	gi 1223698190 gb ACN18697.1 3-phosphoshikimate 1-c	(428)	1065	230.7	1.2e-57
gi 134051714 gb ABO49685.1 3-phosphoshikimate 1-c	(429)	1119	241.9	5.2e-61	gi 1223697902 gb ACN18481.1 3-phosphoshikimate 1-c	(428)	1065	230.7	1.2e-57
gi 167592737 gb ABZ84485.1 3-phosphoshikimate 1-c	(424)	1117	241.5	6.9e-61	gi 1223697898 gb ACN18478.1 3-phosphoshikimate 1-c	(428)	1065	230.7	1.2e-57
gi 123963875 gb ABW78631.1 EPSP synthase (3-phosp	(441)	1116	241.3	8.2e-61	gi 15937585 gb AAE08259.1 Sequence 69 from patent	(443)	1065	230.7	1.3e-57
gi 133634587 emb CAE20573.1 EPSP synthase (3-phosp	(441)	1116	241.3	8.2e-61	gi 12485262 gb AAB73398.1 I14487 Sequence 69 from p	(443)	1065	230.7	1.3e-57
gi 113881454 gb ABT46412.1 3-phosphoshikimate 1-c	(439)	1115	241.1	9.5e-61	gi 472932 emb CAA82544.1 enolpyruvylshikimate 3-p	(443)	1065	230.7	1.3e-57
gi 121201311 gb ACU20491.1 3-phosphoshikimate 1-c	(438)	1114	240.9	1.1e-60	gi 12484185 gb AAB72321.1 I149214 Sequence 69 from p	(443)	1065	230.7	1.3e-57
gi 33632708 emb CAE07520.1 EPSP synthase (3-phosp	(441)	1113	240.7	1.3e-60	gi 144974764 gb ABP12475.1 Sequence 69 from patent	(443)	1065	230.7	1.3e-57
gi 29541129 gb AAO90072.1 3-phosphoshikimate 1-ca	(438)	1111	240.3	1.7e-60	gi 152026654 gb ABS24422.1 3-phosphoshikimate 1-c	(430)	1064	230.5	1.4e-57
gi 136183554 gb EDX78537.1 3-phosphoshikimate 1-c	(453)	1111	240.3	1.7e-60	gi 196193797 gb EDX88756.1 3-phosphoshikimate 1-c	(752)	1067	231.2	1.5e-57
gi 135817147 gb EBK02991.1 hypothetical protein G	(333)	1108	239.6	2e-60	gi 189421466 gb ACD95864.1 3-phosphoshikimate 1-c	(443)	1063	230.3	1.7e-57
gi 2120113861 gb ACU18767.1 3-phosphoshikimate 1-c	(438)	1109	239.8	2.2e-60	gi 110169280 gb ABG53820.1 3-phosphoshikimate 1-c	(462)	1062	230.1	2e-57
gi 22294064 dbj BAC07895.1 3-phosphoshikimate 1-c	(440)	1108	239.6	2.6e-60	gi 1212560430 gb ACU33485.1 5-enolpyruvylshikimate	(428)	1060	229.7	2.6e-57
gi 226718629 gb ACO77880.1 3-phosphoshikimate 1-c	(752)	1111	240.4	2.7e-60	gi 143254111 gb EDP92278.1 hypothetical protein G	(446)	1060	229.7	2.7e-57
gi 142912654 gb EDB47050.1 hypothetical protein G	(437)	1106	239.2	3.5e-60	gi 143040508 gb EDC37864.1 hypothetical protein G	(324)	1056	228.8	3.6e-57

gi 197088984 gb ACH40255.1	3-phosphoshikimate 1-c	(429)	1057	229.0	4e-57	gi 187426429 gb ACD05708.1	3-phosphoshikimate 1-c	(435)	1031	223.6	1.7e-55
gi 144049341 gb EDT49929.1	hypothetical protein G	(434)	1057	229.0	4e-57	gi 144053315 gb EDT52883.1	hypothetical protein G	(435)	1030	223.4	2e-55
gi 135675261 gb EBU14661.1	hypothetical protein G	(312)	1055	228.6	4e-57	gi 143212092 gb EDD62650.1	hypothetical protein G	(440)	1030	223.4	2e-55
gi 139614992 gb ECG28587.1	hypothetical protein G	(296)	1053	228.1	5.1e-57	gi 124514310 gb EAY55824.1	3-phosphoshikimate 1-c	(454)	1030	223.4	2e-55
gi 144022190 gb EDI30532.1	hypothetical protein G	(355)	1054	228.4	5.2e-57	gi 1422267869 gb ECW84629.1	hypothetical protein G	(424)	1029	223.2	2.2e-55
gi 143998481 gb EDI13750.1	hypothetical protein G	(434)	1055	228.6	5.3e-57	gi 136251086 gb EBM89813.1	hypothetical protein G	(439)	1029	223.2	2.3e-55
gi 72001739 gb AAZ57541.1	3-phosphoshikimate 1-ca	(444)	1055	228.6	5.4e-57	gi 91070245 gb ABE11164.1	EPSP synthase [uncultur	(436)	1029	223.0	2.6e-55
gi 56380573 dbj BAD76481.1	3-phosphoshikimate 1-c	(427)	1054	228.4	6.1e-57	gi 143440288 gb EDB96880.1	hypothetical protein G	(450)	1027	222.8	3.1e-55
gi 183573093 gb ABC19645.1	3-phosphoshikimate 1-ca	(435)	1054	228.4	6.2e-57	gi 1257820270 gb EEV47418.1	3-phosphoshikimate 1-c	(431)	1026	222.6	3.5e-55
gi 196170465 gb ACG71438.1	3-phosphoshikimate 1-c	(440)	1053	228.2	7.2e-57	gi 1257836234 gb EEV61308.1	3-phosphoshikimate 1-c	(431)	1026	222.6	3.5e-55
gi 197627301 gb EDX39860.1	3-phosphoshikimate 1-c	(441)	1053	228.2	7.2e-57	gi 1257832317 gb EEV58738.1	3-phosphoshikimate 1-c	(431)	1026	222.6	3.5e-55
gi 142180162 gb ECW18900.1	hypothetical protein G	(665)	1055	228.7	7.7e-57	gi 142796331 gb EDA64709.1	hypothetical protein G	(436)	1026	222.6	3.5e-55
gi 136364387 gb EBN66848.1	hypothetical protein G	(346)	1051	227.7	7.8e-57	gi 142700747 gb ECZ95072.1	hypothetical protein G	(438)	1026	222.6	3.5e-55
gi 143140739 gb EDD11230.1	hypothetical protein G	(437)	1051	227.8	9.5e-57	gi 142089244 gb ECV49966.1	hypothetical protein G	(447)	1026	222.6	3.6e-55
gi 135394319 gb EBH34333.1	hypothetical protein G	(446)	1051	227.8	9.7e-57	gi 134284387 gb ABO69382.1	5-enolpyruvylshikimate	(429)	1025	222.4	4e-55
gi 775455484 gb ABA89126.1	3-phosphoshikimate 1-ca	(431)	1050	227.6	1.1e-56	gi 142343370 gb ECX40386.1	hypothetical protein G	(437)	1025	222.4	4e-55
gi 146232268 gb ABO13246.1	3-phosphoshikimate 1-c	(442)	1050	227.6	1.1e-56	gi 910701571 gb ABE11079.1	EPSP synthase 3-p [uncu	(449)	1025	222.4	4.1e-55
gi 33238026 gb AAQ00093.1	5-enolpyruvylshikimate-	(444)	1050	227.6	1.1e-56	gi 137453563 gb EBU18911.1	hypothetical protein G	(299)	1022	221.7	4.5e-55
gi 116097111 gb ABU62262.1	3-phosphoshikimate 1-c	(434)	1048	227.2	1.5e-56	gi 1242391389 dbj BAH81848.1	3-phosphoshikimate 1-	(430)	1024	222.2	4.6e-55
gi 123198314 gb ABM69955.1	EPSP synthase (3-phosp	(436)	1048	227.2	1.5e-56	gi 1257823269 gb EEV50201.1	3-phosphoshikimate 1-c	(431)	1024	222.2	4.6e-55
gi 143346942 gb EDE47625.1	hypothetical protein G	(432)	1048	227.2	1.5e-56	gi 142552593 gb ECY90600.1	hypothetical protein G	(432)	1024	222.2	4.6e-55
gi 567178391 dbj BAD70280.1	3-phosphoshikimate 1-c	(427)	1047	226.9	1.7e-56	gi 1424000398 gb ECX79396.1	hypothetical protein G	(449)	1024	222.2	4.8e-55
gi 461960181 gb AAS80436.1	3-phosphoshikimate 1-ca	(427)	1046	226.7	1.9e-56	gi 135374189 gb EBH20771.1	hypothetical protein G	(414)	1023	222.0	5.1e-55
gi 39984592 gb AAR35978.1	3-phosphoshikimate 1-ca	(429)	1046	226.7	1.9e-56	gi 142076285 gb ECV39284.1	hypothetical protein G	(430)	1023	222.0	5.3e-55
gi 143061916 gb EDC5306.1	hypothetical protein G	(432)	1045	226.5	2.2e-56	gi 146426078 emb CAM89510.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 159888754 gb ABX08968.1	EPSP synthase (3-phosp	(445)	1046	226.5	2.3e-56	gi 146426070 emb CAM89501.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 140139249 gb ECJ80061.1	hypothetical protein G	(293)	1042	225.8	2.5e-56	gi 146426954 emb CAM89870.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 126795016 dbj BAH43458.1	3-phosphoshikimate 1-	(426)	1044	226.3	2.6e-56	gi 146426038 emb CAM89465.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 1256791333 gb ACV22003.1	3-phosphoshikimate 1-c	(439)	1044	226.3	2.6e-56	gi 146426994 emb CAM89915.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 146397030 gb ABQ25663.1	3-phosphoshikimate 1-c	(428)	1042	225.9	3.4e-56	gi 146426086 emb CAM89519.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 138838604 gb ECC09871.1	hypothetical protein G	(340)	1038	225.0	5e-56	gi 146426094 emb CAM89528.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 1206602804 gb EDD39285.1	3-phosphoshikimate 1-c	(454)	1039	225.3	5.5e-56	gi 146426962 emb CAM89879.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 135494224 gb EBI00757.1	hypothetical protein G	(385)	1038	225.1	5.6e-56	gi 146426978 emb CAM89897.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 123960447 gb ABM75230.1	EPSP synthase (3-phosp	(422)	1038	225.1	6e-56	gi 146426938 emb CAM89852.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 1207088576 gb EDD265848.1	3-phosphoshikimate 1-c	(444)	1038	225.1	6.3e-56	gi 146426102 emb CAM89537.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 76882029 gb ABA567110.1	3-phosphoshikimate 1-ca	(444)	1038	225.1	6.3e-56	gi 146426046 emb CAM89474.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 143333051 gb EDE38631.1	hypothetical protein G	(428)	1037	224.9	7e-56	gi 146426350 emb CAM89816.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 134267287 gb ABO67482.1	3-phosphoshikimate 1-c	(432)	1037	224.9	7.1e-56	gi 146427026 emb CAM89915.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 143926783 gb EDH62981.1	hypothetical protein G	(436)	1037	224.9	7.1e-56	gi 146426062 emb CAM89492.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 1251774476 gb ACT17057.1	3-phosphoshikimate 1-c	(429)	1036	224.7	8.1e-56	gi 146426030 emb CAM89456.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 136170720 gb EBM35960.1	hypothetical protein G	(435)	1036	224.7	8.2e-56	gi 146427002 emb CAM89924.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 123200279 gb ABM71887.1	EPSP synthase (3-phosp	(438)	1036	224.7	8.3e-56	gi 146427034 emb CAM89960.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 135777024 gb EBU77664.1	hypothetical protein G	(414)	1035	224.4	9.1e-56	gi 146426946 emb CAM89861.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 141174096 gb ECQ14403.1	hypothetical protein G	(315)	1032	223.8	1.1e-55	gi 146427018 emb CAM89816.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 167282168 gb ABD35032.1	Sequence 8970 from pat	(424)	1033	224.0	1.2e-55	gi 146426054 emb CAM89483.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 167290440 gb ABE43304.1	Sequence 17242 from pa	(431)	1033	224.0	1.3e-55	gi 146426358 emb CAM89826.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 101742841 dbj BAB05386.1	5-enolpyruvylshikimat	(431)	1033	224.0	1.3e-55	gi 146426986 emb CAM89945.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 222447240 gb ACW51506.1	3-phosphoshikimate 1-c	(435)	1033	224.0	1.3e-55	gi 146426022 emb CAM89447.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 163666945 gb ABY33311.1	3-phosphoshikimate 1-c	(435)	1033	224.0	1.3e-55	gi 146427010 emb CAM89933.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 142953087 gb EDB75980.1	hypothetical protein G	(446)	1032	223.8	1.5e-55	gi 146426930 emb CAM89943.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55
gi 143633398 gb EDF97125.1	hypothetical protein G	(452)	1032	223.8	1.5e-55	gi 146426922 emb CAM89934.1	3-phosphoshikimate-1-	(188)	1018	220.8	5.3e-55

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gi 143683282 gb EDG25451.1	hypothetical protein G	(290)	1020	221.3	5.8e-55	gi 146427954 emb CAM890374.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 135970867 gb EBL05592.1	hypothetical protein G	(449)	1022	221.8	6.4e-55	gi 146425934 emb CAM890348.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 13756719 gb ABC44832.1	3-phosphoshikimate 1-ca	(430)	1021	221.5	7.1e-55	gi 146427178 emb CAM90122.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 262335982 gb ACV49379.1	3-phosphoshikimate 1-c	(434)	1021	221.5	7.1e-55	gi 146426334 emb CAM89798.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 257474981 gb ACV55301.1	3-phosphoshikimate 1-c	(442)	1020	221.3	8.4e-55	gi 146427282 emb CAM90239.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427218 emb CAM90167.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146425407 emb CAM89231.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427314 emb CAM90275.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426254 emb CAM89708.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427330 emb CAM90293.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146425950 emb CAM89366.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427354 emb CAM90320.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427098 emb CAM90032.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427202 emb CAM90149.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426214 emb CAM89663.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427930 emb CAM90347.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427226 emb CAM90176.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427058 emb CAM89987.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427298 emb CAM90257.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427042 emb CAM89969.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427346 emb CAM90311.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146426158 emb CAM89600.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426126 emb CAM89564.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146425431 emb CAM89240.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427306 emb CAM90266.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 169402995 emb CAO99131.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146425918 emb CAM89330.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427210 emb CAM90158.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426270 emb CAM89726.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427066 emb CAM89996.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426166 emb CAM89609.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146425966 emb CAM89384.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427962 emb CAM90383.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146426182 emb CAM89627.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427130 emb CAM90068.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427290 emb CAM90248.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427970 emb CAM90392.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427146 emb CAM90086.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427170 emb CAM90113.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427074 emb CAM90005.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426142 emb CAM89582.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427922 emb CAM90338.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146425423 emb CAM89231.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146426286 emb CAM89744.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426150 emb CAM89591.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146425471 emb CAM89285.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146425447 emb CAM89258.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427234 emb CAM90185.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426310 emb CAM89771.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146426198 emb CAM89645.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427938 emb CAM90356.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427082 emb CAM90014.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146425439 emb CAM89249.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427186 emb CAM90131.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426262 emb CAM89717.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146425487 emb CAM89303.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427114 emb CAM90050.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146426342 emb CAM89807.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426238 emb CAM89690.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427050 emb CAM89978.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146425958 emb CAM89375.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427162 emb CAM90104.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427154 emb CAM90095.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146426118 emb CAM89555.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427946 emb CAM90212.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146426294 emb CAM89753.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426006 emb CAM89429.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146426206 emb CAM89654.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426970 emb CAM89888.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146425998 emb CAM89420.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426006 emb CAM89429.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146426294 emb CAM89753.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427258 emb CAM90212.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146426222 emb CAM89672.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427274 emb CAM90230.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146425415 emb CAM89322.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426110 emb CAM89546.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 169402997 emb CAO99132.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427362 emb CAM90329.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146425391 emb CAM89195.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427322 emb CAM90284.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427106 emb CAM90041.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146425926 emb CAM89339.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146426174 emb CAM89618.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427338 emb CAM90302.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146426278 emb CAM89735.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427250 emb CAM90203.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146425982 emb CAM89402.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426246 emb CAM89699.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146426302 emb CAM89762.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146425399 emb CAM89204.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427090 emb CAM90023.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146425495 emb CAM89312.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146425990 emb CAM89411.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426014 emb CAM89438.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146426318 emb CAM89780.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146427138 emb CAM90077.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55
gi 146427122 emb CAM90059.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55	gi 146426326 emb CAM89789.1	3-phosphoshikimate-1-	(188)	1014	219.9	9.5e-55

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gi 146425974 emb CAM89393.1 3-phosphoshikimate-1- (188) 1014 219.9 9.5e-55	gi 146425239 emb CAM89024.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 146427194 emb CAM890140.1 3-phosphoshikimate-1- (188) 1014 219.9 9.5e-55	gi 146425255 emb CAM89042.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 146425463 emb CAM89276.1 3-phosphoshikimate-1- (188) 1014 219.9 9.5e-55	gi 146425247 emb CAM89033.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 146425455 emb CAM89267.1 3-phosphoshikimate-1- (188) 1014 219.9 9.5e-55	gi 146425271 emb CAM89060.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 146425503 emb CAM89321.1 3-phosphoshikimate-1- (188) 1014 219.9 9.5e-55	gi 146425287 emb CAM89078.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 146425479 emb CAM89294.1 3-phosphoshikimate-1- (188) 1014 219.9 9.5e-55	gi 146425193 emb CAM88970.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 146426230 emb CAM89681.1 3-phosphoshikimate-1- (188) 1014 219.9 9.5e-55	gi 146425295 emb CAM89087.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 146425942 emb CAM89357.1 3-phosphoshikimate-1- (188) 1014 219.9 9.5e-55	gi 146425311 emb CAM89105.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 146426134 emb CAM89573.1 3-phosphoshikimate-1- (188) 1014 219.9 9.5e-55	gi 146425263 emb CAM89051.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 146427242 emb CAM890194.1 3-phosphoshikimate-1- (188) 1014 219.9 9.5e-55	gi 146425231 emb CAM89015.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 146427266 emb CAM90221.1 3-phosphoshikimate-1- (188) 1014 219.9 9.5e-55	gi 146425215 emb CAM88997.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 146427978 emb CAM90401.1 3-phosphoshikimate-1- (188) 1014 219.9 9.5e-55	gi 146425343 emb CAM89141.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 146426190 emb CAM89636.1 3-phosphoshikimate-1- (188) 1014 219.9 9.5e-55	gi 146425199 emb CAM88979.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 157387605 gb ABV50310.1 EPSP synthase (3-phosp (436) 1019 221.1 9.6e-55	gi 146425279 emb CAM89069.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 1256583260 gb ACU94394.1 3-phosphoshikimate 1-c (443) 1019 221.1 9.7e-55	gi 146425319 emb CAM89114.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 1257818523 gb EEV45851.1 3-phosphoshikimate 1-c (431) 1018 220.9 1.1e-54	gi 146425303 emb CAM89096.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 1257825716 gb EEV52342.1 3-phosphoshikimate 1-c (431) 1018 220.9 1.1e-54	gi 146425327 emb CAM89123.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54
gi 1260073869 gb EEW62193.1 3-phosphoshikimate 1-c (431) 1018 220.9 1.1e-54	gi 143387961 gb EDE569064.1 hypothetical protein G (450) 1013 219.9 2.3e-54
gi 123749599 gb AAO46605.1 Sequence 7163 from pate (431) 1018 220.9 1.1e-54	gi 142420835 gb ECX94792.1 hypothetical protein G (408) 1012 219.7 2.5e-54
gi 143005904 gb EDC12672.1 hypothetical protein G (435) 1018 220.9 1.1e-54	gi 143006344 gb EDC12996.1 hypothetical protein G (368) 1011 219.4 2.6e-54
gi 209540793 gb ACI61369.1 3-phosphoshikimate 1-c (427) 1017 220.7 1.3e-54	gi 1219541331 gb ACI23069.1 3-phosphoshikimate 1-c (435) 1012 219.7 2.6e-54
gi 21904763 gb AAM79634.1 putative 3-phosphoshiki (430) 1017 220.7 1.3e-54	gi 171853696 gb AAZ51719.1 putative 3-phosphoshikimate 1-ca (430) 1011 219.5 3e-54
gi 28810994 dbj BAC63328.1 putative 3-phosphoshik (430) 1017 220.7 1.3e-54	gi 260552604 gb EEZ25604.1 3-phosphoshikimate 1-c (432) 1011 219.5 3e-54
gi 145411265 gb ABF68269.1 3-phosphoshikimate 1-c (433) 1017 220.7 1.3e-54	gi 178193339 gb ABB31106.1 3-phosphoshikimate 1-ca (444) 1011 219.5 3.4e-54
gi 1265443020 gb ABO17262.1 EPSP synthase (3-phosp (436) 1017 220.7 1.3e-54	gi 1257812675 gb EEV41433.1 3-phosphoshikimate 1-c (431) 1010 219.3 3.5e-54
gi 140350316 gb ECL17116.1 hypothetical protein G (315) 1015 220.2 1.3e-54	gi 135521687 gb EBI18400.1 hypothetical protein G (424) 1009 219.1 3.9e-54
gi 212564743 gb ACM20715.1 3-phosphoshikimate 1-c (429) 1016 220.5 1.5e-54	gi 142886839 gb EDB28223.1 hypothetical protein G (437) 1009 219.1 4e-54
gi 194546168 gb ABF36215.1 3-phosphoshikimate 1-ca (430) 1016 220.5 1.5e-54	gi 143595742 gb EDF78097.1 hypothetical protein G (452) 1009 219.1 4.2e-54
gi 1342718531 emb CAM30088.1 3-phosphoshikimate 1- (430) 1016 220.5 1.5e-54	gi 164145381 emb CAC97267.1 aroE [Listeria innocua (428) 1008 218.8 4.6e-54
gi 150903493 gb AAT87208.1 3-phosphoshikimate 1-ca (430) 1016 220.5 1.5e-54	gi 170015681 emb CAP05278.1 3-phosphoshikimate-1- (188) 1003 217.6 4.6e-54
gi 194542283 gb ABF32332.1 3-phosphoshikimate 1-ca (430) 1016 220.3 1.7e-54	gi 142517542 gb ECY65289.1 hypothetical protein G (329) 1005 218.2 5.6e-54
gi 135062405 gb EBF25151.1 hypothetical protein G (284) 1013 219.8 1.6e-54	gi 142714811 gb EDA05134.1 hypothetical protein G (333) 1005 218.2 5.7e-54
gi 142745913 gb EDA27571.1 hypothetical protein G (427) 1015 220.3 1.7e-54	gi 156909911 dbj BAD64438.1 3-phosphoshikimate 1-c (430) 1006 218.4 6.1e-54
gi 12983892 gb AAC07443.1 5-enolpyruvylshikimate-3 (431) 1015 220.3 1.7e-54	gi 146425351 emb CAM89150.1 3-phosphoshikimate-1- (188) 1001 217.2 6.2e-54
gi 167273311 gb ABZ226175.1 Sequence 113 from pate (431) 1015 220.3 1.7e-54	gi 1225702144 emb CAM99831.1 3-phosphoshikimate 1- (427) 1005 218.2 7.1e-54
gi 160429338 gb ABX42901.1 3-phosphoshikimate 1-c (436) 1015 220.3 1.7e-54	gi 143838364 gb EDG99243.1 hypothetical protein G (449) 1004 218.0 8.5e-54
gi 1221537862 gb EEE40315.1 3-phosphoshikimate 1-c (436) 1015 220.3 1.7e-54	gi 152023794 gb ABS21564.1 3-phosphoshikimate 1-c (424) 1003 217.8 9.3e-54
gi 171802853 gb AAZ72206.1 3-phosphoshikimate 1-ca (427) 1014 220.1 1.9e-54	gi 136143934 gb EBM18523.1 hypothetical protein G (432) 1002 217.6 1.1e-53
gi 19748517 gb AAU97960.1 putative 3-phosphoshiki (427) 1014 220.1 1.9e-54	gi 159890538 gb ABX03618.1 3-phosphoshikimate 1-c (431) 1001 217.4 1.3e-53
gi 114337807 gb ABT68655.1 3-phosphoshikimate 1-c (428) 1014 220.1 1.9e-54	gi 142401851 gb ECX80480.1 hypothetical protein G (435) 1001 217.4 1.3e-53
gi 146425383 emb CAM89186.1 3-phosphoshikimate-1- (188) 1009 218.9 2e-54	gi 138823093 gb ECC05312.1 hypothetical protein G (299) 998 216.7 1.4e-53
gi 146425375 emb CAM89177.1 3-phosphoshikimate-1- (188) 1009 218.9 2e-54	gi 223698038 gb ACN18583.1 3-phosphoshikimate 1-c (428) 1000 217.2 1.5e-53
gi 146425359 emb CAM89159.1 3-phosphoshikimate-1- (188) 1009 218.9 2e-54	gi 223698102 gb ACN18631.1 3-phosphoshikimate 1-c (428) 1000 217.2 1.5e-53
gi 146425367 emb CAM89168.1 3-phosphoshikimate-1- (188) 1009 218.9 2e-54	gi 78712497 gb ABB49674.1 3-phosphoshikimate 1-ca (436) 1004 220.1 2e-54
gi 143578905 gb EDF73147.1 hypothetical protein G (438) 1014 220.1 2e-54	gi 223697730 gb ACN18352.1 3-phosphoshikimate 1-c (428) 1000 217.2 1.5e-53
gi 146425335 emb CAM89132.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54	gi 223698130 gb ACN18562.1 3-phosphoshikimate 1-c (428) 1000 217.2 1.5e-53
gi 146425223 emb CAM89006.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54	gi 122369810 gb ACN18562.1 3-phosphoshikimate 1-c (428) 1000 217.2 1.5e-53
gi 146425207 emb CAM88988.1 3-phosphoshikimate-1- (188) 1008 218.7 2.3e-54	gi 223697738 gb ACN18358.1 3-phosphoshikimate 1-c (428) 1000 217.2 1.5e-53

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gi 223697934 gb ACN18505.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 2251849803 gb EES7762.1	conserved hypothetical	(424)	993	215.7	3.9e-53
gi 223697726 gb ACN18349.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 222114137 emb CAR42616.1	3-phosphoshikimate 1-	(427)	993	215.7	4e-53
gi 223698014 gb ACN18565.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697946 gb ACN18514.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223697834 gb ACN18430.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223698158 gb ACN18673.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223697734 gb ACN18355.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223698018 gb ACN18568.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223698138 gb ACN18588.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223698078 gb ACN18613.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223697782 gb ACN18391.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697870 gb ACN18457.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223698126 gb ACN18649.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223698006 gb ACN18559.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223698122 gb ACN18646.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223698058 gb ACN18598.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223698178 gb ACN18688.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697962 gb ACN18526.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223697818 gb ACN18418.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697894 gb ACN18475.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223697846 gb ACN18439.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697878 gb ACN18463.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223697786 gb ACN18394.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697954 gb ACN18520.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223697830 gb ACN18427.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697974 gb ACN18535.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223698142 gb ACN18661.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697926 gb ACN18499.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223698106 gb ACN18634.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223698150 gb ACN18667.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223697890 gb ACN18472.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697882 gb ACN18466.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223697806 gb ACN18409.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 16411376 emb CAO00001.1	aroE [Listeria monocyt	(428)	993	215.7	4e-53
gi 223698098 gb ACN18628.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697742 gb ACN18361.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223697790 gb ACN18397.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697810 gb ACN18412.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223698134 gb ACN18555.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223698090 gb ACN18622.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223697798 gb ACN18403.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697850 gb ACN18442.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223697794 gb ACN18400.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223698042 gb ACN18586.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223698146 gb ACN18664.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697922 gb ACN18496.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223697954 gb ACN18370.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697814 gb ACN18415.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223698074 gb ACN18625.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 116742423 emb CAK21367.1	aroA [Listeria welshi	(428)	993	215.7	4e-53
gi 223698202 gb ACN18706.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697914 gb ACN18490.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223697930 gb ACN18502.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697762 gb ACN18376.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223697822 gb ACN18421.1	3-phosphoshikimate 1-c	(428)	1000	217.2	1.5e-53	gi 223697994 gb ACN18550.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 138083024 gb EBX64838.1	hypothetical protein G	(304)	997	216.5	1.7e-53	gi 223697966 gb ACN18529.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 183226926 dbj BAG27442.1	3-phosphoshikimate 1-	(432)	998	216.8	2e-53	gi 223697942 gb ACN18511.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 142300251 gb ECX08327.1	hypothetical protein G	(437)	998	216.8	2e-53	gi 223697998 gb ACN18607.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 33639902 emb CAE19072.1	EPSP synthase (3-phosp	(438)	998	216.8	2e-53	gi 223697858 gb ACN18448.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 142082676 gb ECV44561.1	hypothetical protein G	(438)	998	216.8	2e-53	gi 223698166 gb ACN18679.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 143268164 gb EDE02418.1	hypothetical protein G	(350)	996	216.3	2.2e-53	gi 223698070 gb ACN18607.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 55738600 gb AAV62241.1	3-phosphoshikimate 1-ca	(427)	997	216.6	2.2e-53	gi 223697982 gb ACN18541.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223698074 gb ACN18610.1	3-phosphoshikimate 1-c	(428)	997	216.6	2.2e-53	gi 223697758 gb ACN18373.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 1148417505 gb ABK85924.1	3-phosphoshikimate 1-c	(429)	997	216.6	2.2e-53	gi 223698214 gb ACN18715.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 222455696 gb ACW59958.1	3-phosphoshikimate 1-c	(433)	997	216.6	2.3e-53	gi 223697766 gb ACN18379.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 167282943 gb ABZ35807.1	Sequence 9745 from pat	(417)	996	216.3	2.5e-53	gi 223697978 gb ACN18538.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 140074666 gb ECU36897.1	hypothetical protein G	(299)	994	215.9	2.5e-53	gi 223698030 gb ACN18577.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 55736709 gb AAV60351.1	3-phosphoshikimate 1-ca	(427)	996	216.4	2.6e-53	gi 223697746 gb ACN18364.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 219539671 gb ACU21410.1	3-phosphoshikimate 1-c	(435)	996	216.4	2.6e-53	gi 223698026 gb ACN18574.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 893344561 dbj BAE84051.1	hypothetical protein l	(431)	995	216.1	3e-53	gi 223698222 gb ACN18721.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 156232792 gb ABU57575.1	3-phosphoshikimate 1-c	(431)	995	216.1	3e-53	gi 223698162 gb ACN18676.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 143233975 gb EDD78447.1	hypothetical protein G	(437)	995	216.1	3e-53	gi 223698198 gb ACN18703.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 143019553 gb EDC22663.1	hypothetical protein G	(437)	995	216.1	3e-53	gi 223697918 gb ACN18493.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 195974537 gb ACG62063.1	3-phosphoshikimate 1-c	(427)	994	215.9	3.4e-53	gi 223697774 gb ACN18385.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 225699532 emb CAW93107.1	3-phosphoshikimate 1-	(427)	994	215.9	3.4e-53	gi 223697938 gb ACN18508.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 223698086 gb ACN18619.1	3-phosphoshikimate 1-c	(428)	994	215.9	3.4e-53	gi 223698034 gb ACN18580.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53
gi 42737974 gb AAS41905.1	3-phosphoshikimate 1-ca	(429)	994	215.9	3.5e-53	gi 223697874 gb ACN18460.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53

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gi 223698210 gb ACN18712.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 229268332 gb ACO49969.1	3-phosphoshikimate 1-c	(429)	986	214.3	1.1e-52
gi 223698206 gb ACN18709.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 475518041 gb AAT32071.2	3-phosphoshikimate 1-ca	(429)	986	214.3	1.1e-52
gi 223697770 gb ACN18382.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 227006491 gb ACF16234.1	3-phosphoshikimate 1-c	(429)	986	214.3	1.1e-52
gi 223698182 gb ACN18691.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 491796771 gb AAT55053.1	3-phosphoshikimate 1-ca	(429)	986	214.3	1.1e-52
gi 223697906 gb ACN18484.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 302575441 gb AAP26774.1	3-phosphoshikimate 1-ca	(429)	986	214.3	1.1e-52
gi 223698066 gb ACN18604.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 1270278481 gb EFA24327.1	3-phosphoshikimate 1-c	(427)	985	214.1	1.3e-52
gi 223697862 gb ACN18451.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 223698118 gb ACN18643.1	3-phosphoshikimate 1-c	(428)	985	214.1	1.3e-52
gi 223698110 gb ACN18637.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 217062913 gb ACJ77163.1	3-phosphoshikimate 1-c	(429)	985	214.1	1.3e-52
gi 223698002 gb ACN18556.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 197205480 gb ACH47977.1	3-phosphoshikimate 1-c	(427)	984	213.9	1.5e-52
gi 223697778 gb ACN18388.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 142478979 gb ECY37940.1	hypothetical protein G	(434)	984	213.9	1.5e-52
gi 223698154 gb ACN18670.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 136325414 gb EBN40361.1	hypothetical protein G	(443)	984	213.9	1.5e-52
gi 223697970 gb ACN18532.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 143475974 gb EDF19143.1	hypothetical protein G	(425)	983	213.6	1.7e-52
gi 223697990 gb ACN18547.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 262261195 gb EEY79894.1	3-phosphoshikimate 1-c	(427)	981	213.2	1.7e-52
gi 223697986 gb ACN18544.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 139854247 gb ECH92990.1	hypothetical protein G	(307)	981	213.2	1.7e-52
gi 223698174 gb ACN18685.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 223698082 gb ACN18616.1	3-phosphoshikimate 1-c	(428)	982	213.4	1.9e-52
gi 223698054 gb ACN18595.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 136028731 gb EBL43002.1	hypothetical protein G	(418)	981	213.2	2.2e-52
gi 223697838 gb ACN18433.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 142787199 gb EDA57892.1	hypothetical protein G	(308)	979	212.8	2.3e-52
gi 223698194 gb ACN18700.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 269788888 gb AC241029.1	3-phosphoshikimate 1-c	(439)	981	213.2	2.3e-52
gi 223698170 gb ACN18682.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 136256857 gb EBW93634.1	hypothetical protein G	(434)	980	213.0	2.6e-52
gi 223697886 gb ACN18469.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 135032108 gb EBF05757.1	hypothetical protein G	(416)	979	212.8	2.9e-52
gi 223698022 gb ACN18571.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 157075738 gb ABV10421.1	3-phosphoshikimate 1-c	(427)	979	212.8	3e-52
gi 223697866 gb ACN18454.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 1257800017 gb EEV29069.1	3-phosphoshikimate 1-c	(429)	979	212.8	3e-52
gi 223697910 gb ACN18487.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 257806578 gb EEV35400.1	3-phosphoshikimate 1-c	(429)	979	212.8	3e-52
gi 223697958 gb ACN18523.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 182629665 gb ACB90613.1	3-phosphoshikimate 1-c	(431)	979	212.8	3e-52
gi 223698050 gb ACN18592.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 143656521 gb EDG10782.1	hypothetical protein G	(436)	979	212.8	3e-52
gi 223697950 gb ACN18517.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 243771571 gb AANS58503.1	5-enolpyruvylshikimate 1-c	(427)	978	212.6	3.4e-52
gi 223698226 gb ACN18724.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 52348641 gb AAU41275.1	AroE [Bacillus lichenif	(428)	978	212.6	3.5e-52
gi 223698062 gb ACN18601.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 145903020 gb AAU23920.3	5-enolpyruvylshikimate	(428)	978	212.6	3.5e-52
gi 223697842 gb ACN18436.1	3-phosphoshikimate 1-c	(428)	993	215.7	4e-53	gi 257809882 gb EEV38702.1	3-phosphoshikimate 1-c	(429)	978	212.6	3.5e-52
gi 135911255 gb EBK65191.1	hypothetical protein G	(411)	992	215.5	4.4e-53	gi 228190727 gb ACP61997.1	Sequence 6491 from pat	(464)	978	212.6	3.7e-52
gi 49330610 gb AAT61256.1	3-phosphoshikimate 1-ca	(429)	992	215.5	4.6e-53	gi 136404114 gb EBN94215.1	hypothetical protein G	(389)	976	212.2	4.2e-52
gi 136005759 gb EBL27605.1	hypothetical protein G	(436)	992	215.5	4.7e-53	gi 163862888 gb ABY43947.1	3-phosphoshikimate 1-c	(429)	976	212.2	4.6e-52
gi 223697826 gb ACN18424.1	3-phosphoshikimate 1-c	(428)	991	215.3	5.3e-53	gi 148569867 gb ABQ92012.1	3-phosphoshikimate 1-c	(433)	976	212.2	4.7e-52
gi 218537723 gb ACK90121.1	3-phosphoshikimate 1-c	(429)	991	215.3	5.3e-53	gi 160221349 gb ABX11283.1	5-enolpyruvylshikimate	(454)	976	212.2	4.8e-52
gi 225787055 gb ACO27272.1	3-phosphoshikimate 1-c	(429)	991	215.3	5.3e-53	gi 144215829 gb EDJ70892.1	hypothetical protein G	(390)	975	212.0	4.9e-52
gi 51976038 gb AAU17588.1	3-phosphoshikimate 1-ca	(429)	991	215.3	5.3e-53	gi 142484138 gb ECY41805.1	hypothetical protein G	(408)	975	212.0	5.1e-52
gi 139748663 gb ECH19156.1	hypothetical protein G	(292)	988	214.6	5.9e-53	gi 168995736 gb ACA36348.1	3-phosphoshikimate 1-c	(427)	975	212.0	5.3e-52
gi 134964169 gb EBE59745.1	hypothetical protein G	(425)	990	215.1	6.1e-53	gi 134873812 gb EBB99647.1	hypothetical protein G	(284)	972	211.3	5.8e-52
gi 225876989 emb CAS05698.1	Putative 5-enolpyruv	(428)	990	215.1	6.1e-53	gi 220674574 emb CAR69137.1	3-phosphoshikimate 1-	(427)	974	211.8	6.1e-52
gi 468814261 gb AAT04722.1	3-phosphoshikimate 1-ca	(428)	990	215.1	6.1e-53	gi 225728344 gb ACO24195.1	3-phosphoshikimate 1-c	(427)	974	211.8	6.1e-52
gi 217333195 gb ACK38989.1	3-phosphoshikimate 1-c	(428)	990	215.1	6.1e-53	gi 225720612 gb ACO16466.1	3-phosphoshikimate 1-c	(427)	974	211.8	6.1e-52
gi 116100807 gb ABJ65953.1	3-phosphoshikimate 1-c	(427)	989	214.9	7.1e-53	gi 225722753 gb ACO18606.1	3-phosphoshikimate 1-c	(427)	974	211.8	6.1e-52
gi 218162110 gb ACK62102.1	3-phosphoshikimate 1-c	(429)	989	214.9	7.1e-53	gi 254997648 dbj BAH88249.1	5-enolpyruvylshikimate	(427)	974	211.8	6.1e-52
gi 238966077 gb AAP09886.1	3-phosphoshikimate 1-ca	(429)	989	214.9	7.1e-53	gi 225724804 gb ACO20656.1	3-phosphoshikimate 1-c	(427)	974	211.8	6.1e-52
gi 223697802 gb ACN18406.1	3-phosphoshikimate 1-c	(428)	988	214.7	8.2e-53	gi 194357091 gb ACF55539.1	3-phosphoshikimate 1-c	(427)	974	211.8	6.1e-52
gi 223698114 gb ACN18640.1	3-phosphoshikimate 1-c	(428)	988	214.7	8.2e-53	gi 56634435 gb AAW08901.1	Sequence 4297 from pate	(459)	974	211.8	6.5e-52
gi 218541446 gb ACK93840.1	3-phosphoshikimate 1-c	(429)	988	214.7	8.2e-53	gi 1239807780 gb ACS24845.1	3-phosphoshikimate 1-c	(428)	973	211.6	7.1e-52
gi 136315089 gb EBN333493.1	hypothetical protein G	(448)	988	214.7	8.5e-53	gi 149728561 gb AAK75469.1	3-phosphoshikimate 1-ca	(427)	972	211.4	8.2e-52
gi 135571448 gb EBI50213.1	hypothetical protein G	(418)	987	214.5	9.3e-53	gi 135426956 gb EBH56298.1	hypothetical protein G	(425)	971	211.2	9.4e-52
gi 118502485 gb ABK98967.1	3-phosphoshikimate 1-c	(431)	987	214.5	9.5e-53	gi 189906152 gb ACS58407.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52
gi 269100864 gb AC219851.1	3-phosphoshikimate 1-c	(436)	987	214.5	9.6e-53	gi 189895504 gb ACE53085.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52

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gi 118850301 gb ABL27658.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 1251815711 emb CAZ51311.1	3-phosphoshikimate 1-	(426)	960	208.9	4.6e-51
gi 182938218 gb ACC20088.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 134904510 gb EBE20044.1	hypothetical protein G	(325)	958	208.4	4.9e-51
gi 189900828 gb ACE55746.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 167776701 gb ABZ95002.1	3-phosphoshikimate 1-c	(428)	959	208.7	5.3e-51
gi 189885049 gb ACE48254.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 167780379 gb ABZ98677.1	3-phosphoshikimate 1-c	(428)	959	208.7	5.3e-51
gi 189883653 gb ACG90840.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 2067339263 gb AC118321.1	3-phosphoshikimate 1-c	(435)	959	208.7	5.4e-51
gi 118641667 gb ACB24997.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 157681517 gb ABW62661.1	3-phosphoshikimate 1-c	(428)	958	208.5	6.2e-51
gi 167338106 gb ABZ66405.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 153732520 gb ECH09244.1	hypothetical protein G	(292)	955	207.8	6.8e-51
gi 217237720 gb ACK13966.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 1683583 emb CAA55180.1	5-enolpyruvylshikimate-3	(430)	957	208.2	7.1e-51
gi 25933339 gb ACW44685.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 124493516 emb CAL98495.1	3-phosphoshikimate 1-	(430)	957	208.2	7.1e-51
gi 15115865 gb ABN23306.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 143334178 gb EDS39370.1	hypothetical protein G	(484)	957	208.3	7.9e-51
gi 15616525 gb AAD45819.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 195932969 gb ACG57669.1	3-phosphoshikimate 1-c	(427)	955	207.8	9.5e-51
gi 112096977 gb AB108548.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 1251771402 gb EES51981.1	3-phosphoshikimate 1-c	(446)	955	207.8	9.8e-51
gi 118899388 gb ABL49226.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 143130375 gb EDD03631.1	hypothetical protein G	(342)	953	207.4	1e-50
gi 281104388 gb ADA50902.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 196192722 gb EDX87686.1	3-phosphoshikimate 1-c	(409)	952	207.2	1.4e-50
gi 182925979 gb ACC14532.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 143517608 gb EDF42079.1	hypothetical protein G	(418)	952	207.2	1.4e-50
gi 115887011 gb ABU49677.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 143823880 gb EDG88784.1	hypothetical protein G	(442)	952	207.2	1.5e-50
gi 115811019 gb ABJ32064.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 140283581 gb ECK73924.1	hypothetical protein G	(280)	949	206.5	1.6e-50
gi 14123621 gb AAE57779.1	Sequence 2 from patent	(427)	971	211.2	9.4e-52	gi 2395136843 gb EEQ56709.1	conserved hypothetical	(425)	951	207.0	1.7e-50
gi 472416041 gb AAT16176.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 1226090387 dbj BAH38832.1	3-phosphoshikimate 1-	(672)	953	207.5	1.9e-50
gi 189875194 gb ACE43394.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 24194817 gb AAN48457.1	AE011307_10 3-phosphoshikimate 1-	(440)	950	206.8	2e-50
gi 125085509 gb ABN18836.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 45601534 gb AAS71015.1	3-phosphoshikimate 1-ca	(440)	950	206.8	2e-50
gi 197051730 gb ACH23628.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 189185917 gb ACD83102.1	5-enolpyruvylshikimate	(695)	951	207.1	2.6e-50
gi 196995282 gb ACG98297.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 125498192 gb ABM44858.1	3-phosphoshikimate 1-c	(427)	948	206.4	2.6e-50
gi 112079923 gb AB103507.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 257803529 gb EEV32351.1	3-phosphoshikimate 1-c	(429)	948	206.4	2.6e-50
gi 259339911 gb ACW47959.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 116108251 gb ABU73391.1	3-phosphoshikimate 1-c	(430)	947	206.2	3e-50
gi 196993017 gb ACG95251.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 1406263796 gb ECK64233.1	hypothetical protein G	(273)	944	205.5	3.1e-50
gi 182920657 gb ACC11871.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 142964063 gb EDS83665.1	hypothetical protein G	(387)	945	205.7	3.7e-50
gi 118806535 gb ABU17420.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 141901632 gb ECU04596.1	hypothetical protein G	(291)	943	205.3	3.8e-50
gi 197042321 gb ACH18866.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 116124307 gb ABU75578.1	3-phosphoshikimate 1-c	(440)	943	205.3	5.5e-50
gi 197018713 gb ACH07859.1	Sequence 3546 from pat	(427)	971	211.2	9.4e-52	gi 116121469 gb ABU79512.1	3-phosphoshikimate 1-c	(440)	943	205.3	5.5e-50
gi 167291680 gb ABZ44544.1	Sequence 18482 from pa	(430)	971	211.2	9.5e-52	gi 138056886 gb EBX50330.1	hypothetical protein G	(317)	940	204.7	6.4e-50
gi 127247641 gb AAK05842.1	AE006404_9 3-phosphoshik	(430)	971	211.2	9.5e-52	gi 143503071 gb EDF35219.1	hypothetical protein G	(392)	941	204.9	6.6e-50
gi 136611001 gb EBP27638.1	hypothetical protein G	(365)	970	210.9	9.5e-52	gi 255968720 gb EET99342.1	3-phosphoshikimate 1-c	(428)	939	204.5	9.5e-50
gi 135896096 gb EBK54670.1	hypothetical protein G	(394)	970	210.9	1e-51	gi 125698702 gb EEU85222.1	3-phosphoshikimate 1-c	(428)	939	204.5	9.5e-50
gi 138507712 gb ECA07901.1	hypothetical protein G	(321)	968	210.5	1.1e-51	gi 142439106 gb ECY08464.1	hypothetical protein G	(285)	936	203.8	1e-49
gi 140758638 gb ECN32069.1	hypothetical protein G	(299)	967	210.3	1.2e-51	gi 408063871 gb AAR92125.1	5-enolpyruvylshikimate-	(426)	938	204.3	1.1e-49
gi 139603541 gb ECE20883.1	hypothetical protein G	(307)	967	210.3	1.3e-51	gi 1217336546 gb ACK43239.1	3-phosphoshikimate 1-c	(433)	937	204.1	1.3e-49
gi 136814875 gb EQ58741.1	hypothetical protein G	(434)	969	210.7	1.3e-51	gi 142830212 gb EDA90204.1	hypothetical protein G	(434)	936	203.9	1.5e-49
gi 116076465 gb ABJ54185.1	3-phosphoshikimate 1-c	(427)	968	210.5	1.5e-51	gi 135920803 gb EBK71830.1	hypothetical protein G	(374)	935	203.6	1.5e-49
gi 13458865 gb AAU00033.1	3-Enolpyruvylshikimate-	(431)	968	210.5	1.5e-51	gi 257157926 gb EEU87886.1	3-phosphoshikimate 1-c	(428)	935	203.7	1.7e-49
gi 14106225 gb AAE55840.1	Sequence 2 from patent	(427)	965	209.9	2.2e-51	gi 1257164438 gb EEU94398.1	3-phosphoshikimate 1-c	(428)	935	203.7	1.7e-49
gi 134387655 gb EBB06773.1	hypothetical protein G	(272)	962	209.2	2.3e-51	gi 255963810 gb EET96286.1	3-phosphoshikimate 1-c	(428)	935	203.7	1.7e-49
gi 167289692 gb ABZ42556.1	Sequence 16494 from pa	(417)	964	209.7	2.5e-51	gi 142615026 gb ECX34221.1	hypothetical protein G	(435)	935	203.7	1.7e-49
gi 149948344 gb ABR46872.1	3-phosphoshikimate 1-c	(425)	963	209.5	3e-51	gi 136339509 gb EBM49907.1	hypothetical protein G	(386)	934	203.4	1.8e-49
gi 142551989 gb ECY90178.1	hypothetical protein G	(415)	962	209.3	3.4e-51	gi 142274829 gb ECW89740.1	hypothetical protein G	(354)	933	203.2	1.9e-49
gi 138658485 gb ECB10957.1	hypothetical protein G	(299)	960	208.8	3.4e-51	gi 145691253 gb ABE91758.1	5-enolpyruvylshikimate	(426)	934	203.5	1.9e-49
gi 170287625 dbj BAG14146.1	3-phosphoshikimate 1-	(430)	962	209.3	3.5e-51	gi 1256711589 gb EEU26627.1	3-phosphoshikimate 1-c	(428)	934	203.5	2e-49
gi 154352359 gb ABJ574438.1	AroE [Bacillus amyloli	(428)	961	209.1	4e-51	gi 142661801 gb ECZ67186.1	hypothetical protein G	(360)	932	203.0	2.2e-49
gi 124248218 emb CAL26234.1	5-enolpyruvylshikima	(428)	961	209.1	4e-51	gi 124079671 gb AAG53678.1	AF318277_6 3-phosphoshik	(428)	933	203.3	2.3e-49
gi 251819569 emb CAR45232.1	3-phosphoshikimate 1-	(426)	960	208.9	4.6e-51	gi 144993705 gb ABP15206.1	Sequence 45 from patent	(428)	933	203.3	2.3e-49
gi 251818311 emb CAZ56122.1	3-phosphoshikimate 1-	(426)	960	208.9	4.6e-51	gi 257161129 gb EEU91089.1	3-phosphoshikimate 1-c	(428)	933	203.3	2.3e-49

gi 256990575 gb EEU77877.1 3-phosphoshikimate 1-c	(428)	933	203.3	2.3e-49	gi 134956537 gb EBE60728.1	hypothetical protein G	(399)	897	195.8	3.8e-47
gi 25698595 gb AAU17731.1 3-phosphoshikimate 1-c	(428)	933	203.3	2.3e-49	gi 139723826 gb ECH03396.1	hypothetical protein G	(275)	894	195.1	4.2e-47
gi 29343591 gb AAO81353.1 3-phosphoshikimate 1-ca	(428)	933	203.3	2.3e-49	gi 135056874 gb EBF21645.1	hypothetical protein G	(329)	895	195.3	4.3e-47
gi 256993208 gb EEU080510.1 3-phosphoshikimate 1-c	(428)	933	203.3	2.3e-49	gi 142365697 gb ECX55533.1	hypothetical protein G	(395)	896	195.6	4.3e-47
gi 10130701 gb AAR58446.1 Sequence 4980 from pate	(430)	933	203.3	2.3e-49	gi 143174862 gb ED035554.1	hypothetical protein G	(416)	896	195.6	4.3e-47
gi 256994769 gb AAE082071.1 3-phosphoshikimate 1-c	(428)	932	203.0	2.6e-49	gi 140985559 gb EC085428.1	hypothetical protein G	(269)	893	194.9	4.8e-47
gi 1144974744 gb ABP12455.1 Sequence 42 from paten	(428)	930	202.6	3.5e-49	gi 143031825 gb EDC31489.1	hypothetical protein G	(416)	895	195.4	5.3e-47
gi 143816 gb AAA20869.1 AroE [Bacillus subtilis]	(428)	930	202.6	3.5e-49	gi 143138582 gb EDD09641.1	hypothetical protein G	(313)	892	194.7	6.3e-47
gi 2634678 emb CAB14176.1 3-phosphoshikimate 1-ca	(428)	930	202.6	3.5e-49	gi 136832462 gb EDU70477.1	hypothetical protein G	(371)	892	194.7	7.3e-47
gi 167296372 gb ABZ49236.1 Sequence 23174 from pa	(428)	930	202.6	3.5e-49	gi 134860307 gb EBD90420.1	hypothetical protein G	(369)	889	194.1	1.1e-46
gi 1197053765 gb ACH25463.1 Sequence 15 from paten	(428)	930	202.6	3.5e-49	gi 229263473 gb ACQ54506.1	3-phosphoshikimate 1-c	(442)	890	194.3	1.1e-46
gi 2485242 gb AAB73378.1 I44467 Sequence 42 from p	(428)	930	202.6	3.5e-49	gi 138397559 gb EBX38708.1	hypothetical protein G	(283)	887	193.6	1.2e-46
gi 5957565 gb AAE08239.1 Sequence 42 from patent	(428)	930	202.6	3.5e-49	gi 1221240501 gb ACM13211.1	3-phosphoshikimate 1-c	(399)	889	194.1	1.2e-46
gi 2484165 gb AAB72301.1 I49194 Sequence 42 from p	(428)	930	202.6	3.5e-49	gi 1152930690 gb ABX36189.1	3-phosphoshikimate 1-c	(442)	887	193.7	1.8e-46
gi 135415884 gb EBH48842.1 hypothetical protein G	(390)	929	202.4	3.7e-49	gi 1152928818 gb ABX34318.1	3-phosphoshikimate 1-c	(442)	887	193.7	1.8e-46
gi 142583289 gb ECZ12035.1 hypothetical protein G	(407)	929	202.4	3.8e-49	gi 148288929 emb CAL83016.1 3-phosphoshikimate 1-	(442)	887	193.7	1.8e-46	
gi 256952418 gb EEU69050.1 3-phosphoshikimate 1-c	(428)	929	202.4	4e-49	gi 1226841906 gb AC084572.1	3-phosphoshikimate 1-c	(442)	886	193.5	2e-46
gi 142459624 gb ECY23468.1 hypothetical protein G	(287)	926	201.7	4.4e-49	gi 142654970 gb ECZ62388.1	hypothetical protein G	(433)	883	192.9	3.1e-46
gi 256683745 gb EEU23440.1 3-phosphoshikimate 1-c	(428)	928	202.2	4.6e-49	gi 1169120913 gb ACA44749.1	3-phosphoshikimate 1-c	(442)	883	192.9	3.1e-46
gi 256987046 gb EEU74348.1 3-phosphoshikimate 1-c	(428)	928	202.2	4.6e-49	gi 143688892 gb EDG29042.1	hypothetical protein G	(432)	882	192.7	3.5e-46
gi 256949481 gb EEU66113.1 3-phosphoshikimate 1-c	(428)	928	202.2	4.6e-49	gi 136830361 gb EBQ69080.1	hypothetical protein G	(400)	880	192.2	4.4e-46
gi 256955616 gb EEU72248.1 3-phosphoshikimate 1-c	(428)	928	202.2	4.6e-49	gi 1142014592 gb ECU45073.1	hypothetical protein G	(416)	880	192.2	4.6e-46
gi 142340264 gb ECX38084.1 hypothetical protein G	(383)	926	201.8	5.6e-49	gi 1125714526 gb ABN53418.1	3-phosphoshikimate 1-c	(423)	879	192.0	5.3e-46
gi 134931800 gb EBE38163.1 hypothetical protein G	(352)	923	201.1	8.1e-49	gi 116090991 gb ABU56145.1	3-phosphoshikimate 1-c	(437)	879	192.0	5.5e-46
gi 142736909 gb EDA21008.1 hypothetical protein G	(372)	920	200.5	1.3e-48	gi 1169407871 gb ACA56282.1	3-phosphoshikimate 1-c	(442)	878	191.8	6.4e-46
gi 137367624 gb EBT52837.1 hypothetical protein G	(305)	918	200.1	1.5e-48	gi 136052580 gb EBU59062.1	hypothetical protein G	(390)	877	191.6	6.6e-46
gi 137500819 gb EBU43511.1 hypothetical protein G	(307)	918	200.1	1.5e-48	gi 140596163 gb ECW33153.1	hypothetical protein G	(280)	875	191.1	6.7e-46
gi 141275643 gb ECQ84034.1 hypothetical protein G	(251)	915	199.4	1.9e-48	gi 144136414 gb EDU12922.1	hypothetical protein G	(485)	878	191.9	6.9e-46
gi 140262147 gb ECK63065.1 hypothetical protein G	(251)	911	198.6	3.4e-48	gi 1152936571 gb AB342069.1	3-phosphoshikimate 1-c	(442)	876	191.4	8.5e-46
gi 142241906 gb ECW65482.1 hypothetical protein G	(400)	913	199.1	3.8e-48	gi 1167041247 gb ABZ06003.1	putative EPS synthase	(446)	876	191.4	8.6e-46
gi 134553734 gb EBC04319.1 hypothetical protein G	(344)	912	198.9	3.9e-48	gi 142703421 gb ECZ66994.1	hypothetical protein G	(426)	874	191.0	1.1e-45
gi 75653325 gb ABA45909.1 3-phosphoshikimate 1-ca	(427)	912	198.9	4.6e-48	gi 142560595 gb ECY96203.1	hypothetical protein G	(308)	871	190.3	1.3e-45
gi 22533648 gb AAM99526.1 AE014219_18 3-phospho	(427)	912	198.9	4.6e-48	gi 135727138 gb EBU46737.1	hypothetical protein G	(331)	871	190.3	1.4e-45
gi 134892211 gb EBE11877.1 hypothetical protein G	(363)	911	198.7	4.7e-48	gi 1134974804 gb EBB66929.1	hypothetical protein G	(392)	872	190.6	1.4e-45
gi 136313640 gb EBN32525.1 hypothetical protein G	(435)	912	198.9	4.7e-48	gi 138292864 gb EBY83547.1	hypothetical protein G	(260)	869	189.9	1.5e-45
gi 142307360 gb ECX13668.1 hypothetical protein G	(436)	912	198.9	4.7e-48	gi 1135630574 gb EBI87001.1	hypothetical protein G	(283)	869	189.9	1.6e-45
gi 140523261 gb ECM09716.1 hypothetical protein G	(291)	909	198.2	5.1e-48	gi 1142707532 gb ECY299900.1	hypothetical protein G	(416)	871	190.4	1.7e-45
gi 138494665 gb EBZ99748.1 hypothetical protein G	(269)	908	198.0	5.5e-48	gi 143510416 gb EDF38005.1	hypothetical protein G	(415)	869	190.0	2.2e-45
gi 135903877 gb EBK60098.1 hypothetical protein G	(419)	909	198.3	7e-48	gi 1134855951 gb EBD87629.1	hypothetical protein G	(254)	865	189.0	2.6e-45
gi 23095028 emb CAD46254.1 Unknown [Streptococcus	(427)	907	197.9	9.5e-48	gi 1138461639 gb EBX823709.1	hypothetical protein G	(290)	865	189.0	2.9e-45
gi 134898476 gb EBE16051.1 hypothetical protein G	(405)	906	197.6	1.1e-47	gi 1143906379 gb EDH48348.1	hypothetical protein G	(599)	869	190.0	3e-45
gi 1254045793 gb ACT62586.1 3-phosphoshikimate 1-c	(432)	904	197.2	1.5e-47	gi 143129798 gb EDX03205.1	hypothetical protein G	(431)	867	189.5	3.1e-45
gi 1143452946 gb EDF04465.1 hypothetical protein G	(281)	900	196.3	1.8e-47	gi 142417854 gb ECX92494.1	hypothetical protein G	(660)	868	189.8	3.8e-45
gi 28271504 emb CAD64409.1 3-phosphoshikimate 1-c	(432)	901	196.6	2.3e-47	gi 116229535 gb ABJ88244.1	3-phosphoshikimate 1-c	(426)	865	189.1	4e-45
gi 143396673 gb EDE73613.1 hypothetical protein G	(356)	899	196.2	2.6e-47	gi 1142699976 gb ECY294523.1	hypothetical protein G	(326)	863	188.7	4.3e-45
gi 138568480 gb ECA49921.1 hypothetical protein G	(294)	897	195.7	2.9e-47	gi 142019123 gb ECU88920.1	hypothetical protein G	(414)	864	188.9	4.5e-45
gi 135491965 gb EBH99300.1 hypothetical protein G	(289)	896	195.5	3.3e-47	gi 143234451 gb EDD78785.1	hypothetical protein G	(366)	863	188.7	4.7e-45
gi 142246914 gb ECW69181.1 hypothetical protein G	(296)	896	195.5	3.4e-47	gi 137267823 gb EBT14391.1	hypothetical protein G	(276)	861	188.2	4.9e-45
gi 142577643 gb ECZ08109.1 hypothetical protein G	(416)	898	196.0	3.4e-47	gi 1206741482 gb AC120539.1	3-phosphoshikimate 1-c	(430)	863	188.7	5.4e-45
gi 158140591 gb ABW18903.1 3-phosphoshikimate 1-c	(427)	898	196.0	3.5e-47	gi 1135448115 gb EBH70436.1	hypothetical protein G	(383)	860	188.1	7.6e-45
gi 142808318 gb EDA73669.1 hypothetical protein G	(313)	896	195.5	3.6e-47	gi 136710153 gb EBP89355.1	hypothetical protein G	(272)	856	187.2	1e-44

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gi 143575506 gb EDF71556.1	hypothetical protein G	(358)	857	187.4	1.1e-44	gi 1257271987 gb EEV04125.1	3-phosphoshikimate 1-c	(432)	826	181.0	1.1e-42
gi 143445598 gb EDE99944.1	hypothetical protein G	(366)	856	187.2	1.3e-44	gi 1257284701 gb EEV14821.1	3-phosphoshikimate 1-c	(432)	826	181.0	1.1e-42
gi 1417514371 gb ECT10385.1	hypothetical protein G	(240)	853	186.5	1.4e-44	gi 1492417821 emb CAG40473.1	3-phosphoshikimate 1-c	(432)	826	181.0	1.1e-42
gi 167045751 gb AB210397.1	putative EPS synthase	(443)	856	187.3	1.5e-44	gi 1257278947 gb EEV09566.1	3-phosphoshikimate 1-c	(432)	826	181.0	1.1e-42
gi 142502561 gb ECY54068.1	hypothetical protein G	(274)	852	186.3	1.8e-44	gi 1138508120 gb ECA08043.1	hypothetical protein G	(264)	823	180.3	1.1e-42
gi 1222120489 dbj BAH17824.1	3-phosphoshikimate 1-	(433)	854	186.8	2e-44	gi 1142552699 gb ECY90674.1	hypothetical protein G	(258)	823	180.8	1.3e-42
gi 135770651 gb EBJ73691.1	hypothetical protein G	(349)	852	186.4	2.2e-44	gi 1142973132 gb EDR8862.1	hypothetical protein G	(315)	822	180.1	1.3e-42
gi 1417164801 gb ECS90978.1	hypothetical protein G	(351)	852	186.4	2.2e-44	gi 1139178038 gb EC094124.1	hypothetical protein G	(315)	822	180.1	1.5e-42
gi 161726857 emb CAP47298.1	unnamed protein produ	(439)	853	186.6	2.3e-44	gi 1139089271 gb EC033698.1	hypothetical protein G	(268)	821	179.9	1.5e-42
gi 128037191 gb AAO36160.1	3-phosphoshikimate 1-ca	(439)	853	186.6	2.3e-44	gi 1142941353 gb EDR67616.1	hypothetical protein G	(419)	823	180.4	1.7e-42
gi 1401532471 gb ECJ87824.1	hypothetical protein G	(307)	850	185.9	2.6e-44	gi 1143051067 gb EDC45621.1	hypothetical protein G	(338)	821	179.9	1.9e-42
gi 163861631 gb ABY42890.1	3-phosphoshikimate 1-c	(367)	850	186.0	3.1e-44	gi 1133388286 gb EBH30252.1	hypothetical protein G	(247)	819	179.5	1.9e-42
gi 1257934401 gb ACO33530.1	3-phosphoshikimate 1-c	(433)	847	185.4	5.5e-44	gi 1143823138 gb EDG88250.1	hypothetical protein G	(277)	819	179.5	2.1e-42
gi 1381993501 gb EBX35573.1	hypothetical protein G	(281)	844	184.7	5.8e-44	gi 1158604933 gb ABW74752.1	3-phosphoshikimate 1-c	(428)	821	180.0	2.3e-42
gi 1422364101 gb ECW61386.1	hypothetical protein G	(315)	844	184.7	6.4e-44	gi 1143990770 gb ED108126.1	hypothetical protein G	(321)	819	179.5	2.4e-42
gi 12294701421 gb ACQ71914.1	3-phosphoshikimate 1-c	(416)	845	185.0	7.1e-44	gi 1826565941 emb CA181017.1	3-phosphoshikimate 1-c	(432)	820	179.8	2.7e-42
gi 1425214721 gb ECY68161.1	hypothetical protein G	(443)	845	185.0	7.4e-44	gi 1135341079 gb EBG98573.1	hypothetical protein G	(269)	817	179.1	2.7e-42
gi 138683081 gb ECB28394.1	hypothetical protein G	(246)	841	184.0	8e-44	gi 1143505131 gb EDP35248.1	hypothetical protein G	(381)	819	179.5	2.8e-42
gi 135924801 gb EBK74524.1	hypothetical protein G	(368)	843	184.5	8.5e-44	gi 1136274212 gb EBN05767.1	hypothetical protein G	(343)	817	179.1	3.4e-42
gi 141062261 gb AAE55841.1	Sequence 4 from patent	(415)	843	184.5	9.4e-44	gi 1136878306 gb EBR00609.1	hypothetical protein G	(266)	815	178.6	3.6e-42
gi 141123631 gb AAE57780.1	Sequence 4 from patent	(415)	843	184.5	9.4e-44	gi 1139609260 gb ECG24653.1	hypothetical protein G	(267)	815	178.6	3.6e-42
gi 143413221 gb EDD13054.1	hypothetical protein G	(343)	841	184.1	1.1e-43	gi 1140734279 gb ECN15117.1	hypothetical protein G	(219)	813	178.2	4.1e-42
gi 1719903231 gb ACB61245.1	3-phosphoshikimate 1-c	(417)	842	184.3	1.1e-43	gi 141829663 gb ECY53965.1	hypothetical protein G	(306)	815	178.7	4.1e-42
gi 1429757161 gb EDB91669.1	hypothetical protein G	(334)	840	183.9	1.2e-43	gi 142963473 gb EDR883252.1	hypothetical protein G	(432)	817	179.2	4.1e-42
gi 1440475891 gb EDT48620.1	hypothetical protein G	(354)	840	183.9	1.3e-43	gi 1134338102 gb ECB37889.1	hypothetical protein G	(291)	814	178.5	4.5e-42
gi 1436514471 gb EDG07727.1	hypothetical protein G	(334)	839	183.7	1.4e-43	gi 1139248991 gb ECB35883.1	hypothetical protein G	(293)	814	178.5	4.5e-42
gi 1390939771 gb ECD37104.1	hypothetical protein G	(289)	838	183.4	1.4e-43	gi 1137063356 gb EBS00002.1	hypothetical protein G	(249)	813	178.2	4.5e-42
gi 1432603291 gb EDG96800.1	hypothetical protein G	(236)	837	183.2	1.5e-43	gi 1143533533 gb EDY49839.1	hypothetical protein G	(445)	816	178.9	4.9e-42
gi 13564475621 gb EBT97552.1	hypothetical protein G	(338)	836	183.1	2.2e-43	gi 1262080109 gb ACV16078.1	3-phosphoshikimate 1-c	(459)	816	179.0	5e-42
gi 2215716901 gb ACM22502.1	3-phosphoshikimate 1-c	(421)	837	183.3	2.3e-43	gi 1189341744 gb ACD91147.1	3-phosphoshikimate 1-c	(434)	815	178.7	5.5e-42
gi 2140405431 gb EBB81191.1	3-phosphoshikimate 1-c	(421)	837	183.3	2.3e-43	gi 1138329239 gb EBZ00337.1	hypothetical protein G	(321)	813	178.3	5.9e-42
gi 170175891 gb ACB08943.1	3-phosphoshikimate 1-c	(421)	837	183.3	2.3e-43	gi 1143906650 gb EDH48541.1	hypothetical protein G	(662)	817	179.2	5.9e-42
gi 1477332561 gb ABQ46596.1	3-phosphoshikimate 1-c	(421)	837	183.3	2.3e-43	gi 1871259001 gb ABD20414.1	3-phosphoshikimate 1-ca	(432)	814	178.5	6.3e-42
gi 1388808371 gb ECC27684.1	hypothetical protein G	(257)	834	182.6	2.3e-43	gi 1269940957 emb CB149341.1	3-phosphoshikimate 1-	(432)	814	178.5	6.3e-42
gi 1672761291 gb ABZ28993.1	Sequence 2931 from pat	(410)	835	182.9	2.9e-43	gi 1492447471 emb CAG43183.1	3-phosphoshikimate 1-c	(432)	814	178.5	6.3e-42
gi 49808461 AAD35431.1	AE001715_7 3-phosphoshiki	(410)	835	182.9	2.9e-43	gi 1503743871 dbj BAF67647.1	3-phosphoshikimate 1-	(432)	814	178.5	6.3e-42
gi 1413032601 gb ECQ94812.1	hypothetical protein G	(320)	833	182.4	3.2e-43	gi 1212045231 dbj BAB95219.1	3-PHOSPHOSHIKIMATE 1-C	(432)	814	178.5	6.3e-42
gi 1273156161 gb AAO4750.1	AE016747_247 3-phosphosh	(433)	833	182.5	4.1e-43	gi 1872027561 gb ABD30566.1	3-phosphoshikimate 1-ca	(432)	814	178.5	6.3e-42
gi 1345623591 gb EBC08340.1	hypothetical protein G	(318)	831	182.0	4.2e-43	gi 160368441 gb ABX29412.1	3-phosphoshikimate 1-c	(432)	814	178.5	6.3e-42
gi 1354893091 gb EBH97380.1	hypothetical protein G	(350)	830	181.8	5.3e-43	gi 1281032786 gb ADA18062.1	Sequence 5610 from pat	(435)	814	178.5	6.4e-42
gi 1684471731 dbj BAE04757.1	3-phosphoshikimate 1-c	(432)	830	181.9	6.3e-43	gi 1144188786 gb EDJ51597.1	hypothetical protein G	(603)	815	178.8	7.3e-42
gi 1420872821 gb ECV48343.1	hypothetical protein G	(425)	829	181.6	7.2e-43	gi 1572846051 gb AAW36699.1	3-phosphoshikimate 1-ca	(432)	813	178.3	7.3e-42
gi 1576376301 gb AAW54418.1	3-phosphoshikimate 1-ca	(433)	829	181.6	7.3e-43	gi 1136995971 gb EBR61979.1	hypothetical protein G	(325)	811	177.8	7.6e-42
gi 2810439571 gb ADA22685.1	Sequence 3223 from pat	(436)	829	181.6	7.4e-43	gi 1136354113 gb EBN59856.1	hypothetical protein G	(283)	801	177.6	7.8e-42
gi 2592693761 gb ACW29189.1	Sequence 3223 from pat	(436)	829	181.6	7.4e-43	gi 1138555285 gb ECA34067.1	hypothetical protein G	(267)	809	177.4	8.6e-42
gi 1217109301 gb ACQ93181.1	Sequence 3223 from pat	(436)	829	181.6	7.4e-43	gi 1262075379 gb ACV11352.1	3-phosphoshikimate 1-c	(432)	811	177.9	9.8e-42
gi 1434664801 gb EDF13416.1	hypothetical protein G	(273)	825	180.7	7.7e-43	gi 1142472351 gb BES57626.1	3-phosphoshikimate 1-c	(432)	811	177.9	9.8e-42
gi 2070847141 gb EDF622001.1	3-phosphoshikimate 1-c	(427)	827	181.2	9.6e-43	gi 1156721918 dbj BAF78335.1	3-phosphoshikimate 1-	(432)	811	177.9	9.8e-42
gi 1350956291 gb EDF46390.1	hypothetical protein G	(225)	823	180.3	9.9e-43	gi 1137012631 dbj BA842557.1	3-phosphoshikimate 1-c	(432)	811	177.9	9.8e-42
gi 2572816701 gb EEV111807.1	3-phosphoshikimate 1-c	(432)	826	181.0	1.1e-42	gi 1135176472 gb EBR98299.1	hypothetical protein G	(278)	808	177.2	1e-41
gi 2572750301 gb EEV06517.1	3-phosphoshikimate 1-c	(432)	826	181.0	1.1e-42	gi 1439131001 gb EDH52995.1	hypothetical protein G	(479)	811	177.9	1.1e-41

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gi 142344653 gb ECX41282.1	hypothetical protein G	(430)	809	177.5	1.3e-41	gi 135473041 gb EBH87124.1	hypothetical protein G	(425)	783	172.1	5.4e-40
gi 194312559 gb ACF46954.1	3-phosphoshikimate 1-c	(434)	809	177.5	1.3e-41	gi 143880166 gb EDH29665.1	hypothetical protein G	(333)	781	171.6	5.9e-40
gi 142888789 gb EBD29602.1	hypothetical protein G	(430)	808	177.3	1.5e-41	gi 142062898 gb ECV27877.1	hypothetical protein G	(430)	782	171.9	6.3e-40
gi 1939496332 gb ACE05080.1	3-phosphoshikimate 1-c	(435)	808	177.3	1.5e-41	gi 193085440 gb ACF107116.1	3-phosphoshikimate 1-c	(434)	782	171.9	6.4e-40
gi 134547100 gb EBB99141.1	hypothetical protein G	(336)	806	176.8	1.6e-41	gi 1432663748 gb EDD99246.1	hypothetical protein G	(430)	781	171.7	7.3e-40
gi 142309197 gb ECX15063.1	hypothetical protein G	(340)	806	176.8	1.6e-41	gi 1256008713 gb ACU54280.1	3-phosphoshikimate 1-c	(434)	781	171.7	7.4e-40
gi 142383766 gb ECB7542.1	hypothetical protein G	(430)	807	177.1	1.7e-41	gi 32261686 gb AAP76736.1	3-phosphoshikimate 1-c	(438)	781	171.7	7.4e-40
gi 78497609 gb ABBA44149.1	3-phosphoshikimate 1-ca	(428)	806	176.9	2e-41	gi 1362211928 gb EBM63318.1	hypothetical protein G	(333)	779	171.2	7.8e-40
gi 144199065 gb EDU59187.1	hypothetical protein G	(246)	801	175.7	2.5e-41	gi 139841346 gb ECH83875.1	hypothetical protein G	(258)	777	170.7	8.4e-40
gi 135033333 gb EBF06615.1	hypothetical protein G	(414)	804	176.4	2.6e-41	gi 139163008 gb ECN83628.1	hypothetical protein G	(312)	777	170.8	9.9e-40
gi 260078368 gb EEW66073.1	LOW QUALITY PROTEIN: 3	(266)	801	175.7	2.7e-41	gi 135319394 gb EBG83991.1	hypothetical protein G	(333)	777	170.8	1e-39
gi 140334519 gb ECL05829.1	hypothetical protein G	(270)	800	175.5	3.2e-41	gi 138154978 gb EBX062220.1	hypothetical protein G	(209)	773	169.9	1.2e-39
gi 138262365 gb EBE65200.1	hypothetical protein G	(238)	799	175.3	3.3e-41	gi 135240518 gb EBG36889.1	hypothetical protein G	(311)	775	170.4	1.3e-39
gi 134990285 gb EBE77443.1	hypothetical protein G	(300)	800	175.5	3.5e-41	gi 138397214 gb EBZ38470.1	hypothetical protein G	(334)	775	170.4	1.4e-39
gi 137254189 gb EBT06708.1	hypothetical protein G	(285)	799	175.3	3.8e-41	gi 144025250 gb EDJ32680.1	hypothetical protein G	(308)	774	170.1	1.5e-39
gi 137335428 gb EBT52086.1	hypothetical protein G	(303)	798	175.1	4.7e-41	gi 141897414 gb ECU01571.1	hypothetical protein G	(305)	773	169.9	1.7e-39
gi 144219781 gb EDJ73727.1	hypothetical protein G	(428)	800	175.6	4.7e-41	gi 136622362 gb EBP34455.1	hypothetical protein G	(328)	772	169.7	2.1e-39
gi 135781046 gb EBU80223.1	hypothetical protein G	(308)	798	175.1	4.7e-41	gi 140030681 gb ECU12144.1	hypothetical protein G	(246)	770	169.3	2.2e-39
gi 149946463 gb ABR52401.1	3-phosphoshikimate 1-c	(432)	800	175.6	4.8e-41	gi 138700831 gb ECB40892.1	hypothetical protein G	(314)	771	169.5	2.4e-39
gi 147741019 gb ABO49317.1	3-phosphoshikimate 1-c	(432)	800	175.6	4.8e-41	gi 139949518 gb ECU57412.1	hypothetical protein G	(283)	770	169.3	2.5e-39
gi 151422271 dbj BAF69775.1	3-phosphoshikimate 1-	(433)	800	175.6	4.8e-41	gi 142893869 gb EDB33252.1	hypothetical protein G	(557)	774	170.3	2.5e-39
gi 135266853 gb EBG52293.1	hypothetical protein G	(424)	799	175.4	5.4e-41	gi 135329585 gb EBG90868.1	hypothetical protein G	(450)	772	169.8	2.8e-39
gi 139490738 gb ECF43051.1	hypothetical protein G	(279)	796	174.7	5.8e-41	gi 134644279 gb EBG57396.1	hypothetical protein G	(256)	768	168.9	3e-39
gi 136328373 gb EBN42356.1	hypothetical protein G	(293)	796	174.7	6.1e-41	gi 134947939 gb EBB48938.1	hypothetical protein G	(308)	769	169.1	3.1e-39
gi 143414697 gb EBE83057.1	hypothetical protein G	(429)	798	175.2	6.3e-41	gi 135183725 gb EDC07619.1	hypothetical protein G	(265)	768	168.9	3.1e-39
gi 119353598 gb ABL66269.1	3-phosphoshikimate 1-c	(434)	798	175.2	6.4e-41	gi 143093399 gb EDC76589.1	hypothetical protein G	(228)	767	168.6	3.2e-39
gi 14135624 gb ECR25075.1	hypothetical protein G	(303)	795	174.5	7.2e-41	gi 5957566 gb AAE08240.1	Sequence 44 from patent	(430)	770	169.4	3.6e-39
gi 135098087 gb EBF47962.1	hypothetical protein G	(222)	793	174.0	7.3e-41	gi 2485243 gb AAB73379.1	Sequence 44 from p	(430)	770	169.4	3.6e-39
gi 143971097 gb EDH94528.1	hypothetical protein G	(570)	798	175.3	8.1e-41	gi 2484166 gb AAB72302.1	Sequence 44 from p	(430)	770	169.4	3.6e-39
gi 137854115 gb EBW38016.1	hypothetical protein G	(286)	793	174.1	9.1e-41	gi 152956 gb AAA71897.1	3-phosphoshikimate-1-carb	(430)	770	169.4	3.6e-39
gi 141976830 gb ECU56929.1	hypothetical protein G	(330)	793	174.1	1e-40	gi 144974745 gb ABF12456.1	Sequence 44 from paten	(430)	770	169.4	3.6e-39
gi 142680915 gb ECB280867.1	hypothetical protein G	(338)	793	174.1	1.1e-40	gi 142011761 gb ECU81815.1	hypothetical protein G	(440)	770	169.4	3.6e-39
gi 141101489 gb ECP63549.1	hypothetical protein G	(294)	792	173.9	1.1e-40	gi 136955165 gb EBR38869.1	hypothetical protein G	(311)	767	168.7	4.2e-39
gi 141097662 gb ECP60818.1	hypothetical protein G	(301)	792	173.9	1.1e-40	gi 142971616 gb EDB88788.1	hypothetical protein G	(317)	767	168.7	4.2e-39
gi 137395150 gb EBT85818.1	hypothetical protein G	(319)	792	173.9	1.2e-40	gi 144037176 gb EDI41070.1	hypothetical protein G	(544)	770	169.4	4.4e-39
gi 142090737 gb ECV51207.1	hypothetical protein G	(425)	793	174.2	1.3e-40	gi 1423331844 gb ECX31901.1	hypothetical protein G	(430)	768	169.0	4.8e-39
gi 139921163 gb ECI38192.1	hypothetical protein G	(235)	789	173.2	1.4e-40	gi 142267558 gb ECW84392.1	hypothetical protein G	(313)	766	168.5	4.8e-39
gi 194310012 gb ACF44712.1	3-phosphoshikimate 1-c	(433)	792	174.0	1.5e-40	gi 144212823 gb EDJ68735.1	hypothetical protein G	(445)	768	169.0	4.9e-39
gi 34483387 emb CAE10385.1	3-PHOSPHOSHIKIMATE 1-C	(437)	792	174.0	1.5e-40	gi 143877405 gb EDH27656.1	hypothetical protein G	(447)	768	169.0	4.9e-39
gi 142643653 gb ECZ54421.1	hypothetical protein G	(339)	790	173.5	1.6e-40	gi 144073503 gb EDI68980.1	hypothetical protein G	(474)	768	169.0	5.2e-39
gi 142006350 gb ECQ77442.1	hypothetical protein G	(324)	789	173.3	1.8e-40	gi 142403788 gb ECX81944.1	hypothetical protein G	(333)	765	168.3	5.9e-39
gi 139420983 gb ECE99819.1	hypothetical protein G	(337)	788	173.1	2.2e-40	gi 138571481 gb ECB52062.1	hypothetical protein G	(245)	763	167.8	6e-39
gi 144105457 gb EDI90364.1	hypothetical protein G	(242)	786	172.6	2.2e-40	gi 133564074 gb EBH13997.1	hypothetical protein G	(441)	766	168.6	6.5e-39
gi 143978542 gb EDH99586.1	hypothetical protein G	(260)	786	172.6	2.3e-40	gi 142133901 gb ECB3825.1	hypothetical protein G	(430)	765	168.3	7.3e-39
gi 21647940 gb AAM73137.1	3-phosphoshikimate 1-ca	(434)	789	173.3	2.3e-40	gi 145205328 gb ABP36371.1	3-phosphoshikimate 1-c	(433)	765	168.3	7.4e-39
gi 194552691 gb ABF42615.1	3-phosphoshikimate 1-ca	(435)	789	173.3	2.3e-40	gi 138740709 gb ECI10949.1	hypothetical protein G	(342)	763	167.9	8e-39
gi 253510676 gb EES89335.1	5-enolpyruvylshikimate	(436)	789	173.3	2.3e-40	gi 157700108 gb ABV68268.1	3-phosphoshikimate 1-c	(425)	764	168.1	8.4e-39
gi 140902672 gb ECO27576.1	hypothetical protein G	(290)	786	172.6	2.5e-40	gi 142585981 gb ECJ13884.1	hypothetical protein G	(441)	764	168.1	8.7e-39
gi 135918291 gb EBK70077.1	hypothetical protein G	(307)	785	172.4	3.1e-40	gi 144051266 gb EDI51354.1	hypothetical protein G	(327)	762	167.7	8.9e-39
gi 142317432 gb ECX21250.1	hypothetical protein G	(454)	786	172.7	3.7e-40	gi 139284870 gb ECB45110.1	hypothetical protein G	(241)	760	167.2	9.2e-39
gi 139662994 gb ECG60888.1	hypothetical protein G	(279)	782	171.8	4.4e-40	gi 135647573 gb EBI97559.1	hypothetical protein G	(298)	759	167.0	1.3e-38

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gi 143992208 gb EDI09178.1	hypothetical protein G (432)	761	167.5	1.3e-38	gi 1368660454 gb EB089188.1	hypothetical protein G (246)	736	162.2	3e-37
gi 1436962214 gb EDC322946.1	hypothetical protein G (434)	761	167.5	1.3e-38	gi 140955798 gb EC064828.1	hypothetical protein G (273)	736	162.2	3.2e-37
gi 141935581 gb ECU28288.1	hypothetical protein G (226)	757	166.6	1.3e-38	gi 139768554 gb ECH32813.1	hypothetical protein G (278)	736	162.2	3.3e-37
gi 139664047 gb ECG661621.1	hypothetical protein G (258)	757	166.6	1.5e-38	gi 135103443 gb EBF551389.1	hypothetical protein G (418)	736	162.7	3.5e-37
gi 141064495 gb ECP38367.1	hypothetical protein G (306)	758	166.8	1.5e-38	gi 135134351 gb EC063724.1	hypothetical protein G (301)	736	162.2	3.5e-37
gi 137335317 gb EBT52025.1	hypothetical protein G (306)	758	166.8	1.5e-38	gi 140036702 gb ECU16354.1	hypothetical protein G (301)	736	162.2	3.5e-37
gi 134622016 gb EBC44186.1	hypothetical protein G (314)	758	166.8	1.5e-38	gi 140729862 gb ECN11951.1	hypothetical protein G (304)	736	162.2	3.5e-37
gi 142656427 gb ECZ63418.1	hypothetical protein G (445)	760	167.3	1.6e-38	gi 140364603 gb ECU26871.1	hypothetical protein G (219)	734	161.8	3.6e-37
gi 143830321 gb EDG93382.1	hypothetical protein G (449)	760	167.3	1.6e-38	gi 143449513 gb EDF02359.1	hypothetical protein G (444)	738	162.7	3.7e-37
gi 139939562 gb ECF51111.1	hypothetical protein G (308)	757	166.6	1.7e-38	gi 143676349 gb EDG21217.1	hypothetical protein G (446)	738	162.7	3.7e-37
gi 78171788 gb ABB28884.1	3-phosphoshikimate 1-ca (435)	759	167.1	1.8e-38	gi 139696294 gb ECG83976.1	hypothetical protein G (287)	735	162.0	3.9e-37
gi 136821916 gb EBQ63445.1	hypothetical protein G (319)	757	166.6	1.8e-38	gi 135562484 gb EBI44473.1	hypothetical protein G (293)	735	162.0	4e-37
gi 134801092 gb EBD52793.1	hypothetical protein G (446)	759	167.1	1.8e-38	gi 134813827 gb EBB06098.1	hypothetical protein G (286)	734	161.8	4.5e-37
gi 134675387 gb EBC75542.1	hypothetical protein G (306)	755	166.2	2.3e-38	gi 222421192 emb CAL28006.1	3-phosphoshikimate 1- (432)	736	162.3	4.8e-37
gi 140528515 gb ECM11387.1	hypothetical protein G (318)	755	166.2	2.4e-38	gi 142156622 gb ECW00862.1	hypothetical protein G (222)	732	161.4	4.8e-37
gi 143006221 gb EDC12907.1	hypothetical protein G (448)	757	166.7	2.4e-38	gi 142220950 gb ECW49934.1	hypothetical protein G (747)	739	163.0	5e-37
gi 141860322 gb ECT75628.1	hypothetical protein G (283)	754	166.0	2.5e-38	gi 141163007 gb EC006591.1	hypothetical protein G (235)	732	161.4	5.1e-37
gi 136630657 gb EBP39342.1	hypothetical protein G (335)	755	166.2	2.5e-38	gi 137000351 gb EBK64461.1	hypothetical protein G (305)	733	161.6	5.5e-37
gi 134775377 gb EDB34861.1	hypothetical protein G (406)	756	166.5	2.6e-38	gi 724951041 dbj BAE18425.1	5-encolpyruvylshikimate (432)	735	162.1	5.6e-37
gi 136302090 gb EBN24661.1	hypothetical protein G (430)	756	166.5	2.7e-38	gi 193088545 gb ACR13820.1	3-phosphoshikimate 1-c (435)	735	162.1	5.6e-37
gi 142888313 gb EDB29243.1	hypothetical protein G (321)	754	166.0	2.8e-38	gi 137930097 gb EBW81399.1	hypothetical protein G (306)	732	161.4	6.4e-37
gi 141233171 gb ECQ54347.1	hypothetical protein G (228)	751	165.3	3.2e-38	gi 142971459 gb EDB88674.1	hypothetical protein G (315)	732	161.4	6.5e-37
gi 22358889 gb ACM92625.1	3-phosphoshikimate 1-c (431)	754	166.1	3.6e-38	gi 141382733 gb ECR44145.1	hypothetical protein G (233)	730	160.9	6.7e-37
gi 135502733 gb EBI06227.1	hypothetical protein G (271)	751	165.3	3.7e-38	gi 262223840 gb EEY74299.1	3-phosphoshikimate 1-c (665)	735	162.2	8.1e-37
gi 141024369 gb ECP11205.1	hypothetical protein G (274)	751	165.3	3.7e-38	gi 141192666 gb ECQ26680.1	hypothetical protein G (258)	729	160.8	8.4e-37
gi 138011480 gb EBX26531.1	hypothetical protein G (292)	751	165.4	4e-38	gi 141378761 gb ECR41291.1	hypothetical protein G (221)	728	160.5	8.5e-37
gi 134407854 gb EBB17419.1	hypothetical protein G (293)	750	165.2	4.6e-38	gi 135969735 gb EBU04825.1	hypothetical protein G (263)	729	160.8	8.6e-37
gi 138073518 gb EBX59366.1	hypothetical protein G (289)	749	164.9	5.2e-38	gi 143031842 gb EDC31502.1	hypothetical protein G (316)	730	161.0	8.7e-37
gi 135097328 gb EBF47474.1	hypothetical protein G (314)	749	165.0	5.6e-38	gi 137889644 gb EBW58374.1	hypothetical protein G (275)	729	160.8	8.9e-37
gi 141494611 gb ECS06053.1	hypothetical protein G (234)	747	164.5	5.8e-38	gi 140991096 gb EC089414.1	hypothetical protein G (280)	729	160.8	9.1e-37
gi 138660172 gb ECB12113.1	hypothetical protein G (276)	747	164.5	6.7e-38	gi 139558026 gb ECF89335.1	hypothetical protein G (296)	729	160.8	9.5e-37
gi 141299754 gb ECQ93545.1	hypothetical protein G (286)	747	164.5	6.9e-38	gi 229376059 gb EE026150.1	3-phosphoshikimate 1-c (434)	731	161.3	9.9e-37
gi 143240990 gb EDD83029.1	hypothetical protein G (430)	749	165.0	7.4e-38	gi 144082397 gb EDI74102.1	hypothetical protein G (515)	732	161.5	1e-36
gi 139617327 gb ECG29769.1	hypothetical protein G (270)	746	164.3	7.6e-38	gi 142096572 gb ECV56061.1	hypothetical protein G (434)	730	161.1	1.1e-36
gi 138602361 gb ECA73437.1	hypothetical protein G (300)	746	164.3	8.3e-38	gi 134767569 gb EBD29449.1	hypothetical protein G (449)	727	160.4	1.2e-36
gi 142294047 gb ECX03786.1	hypothetical protein G (323)	746	164.3	8.9e-38	gi 134325002 gb EBA65155.1	hypothetical protein G (299)	727	160.4	1.3e-36
gi 136830709 gb EBQ69311.1	hypothetical protein G (327)	746	164.3	9e-38	gi 141765239 gb ECN35318.1	hypothetical protein G (307)	727	160.4	1.3e-36
gi 135080385 gb EBF36631.1	hypothetical protein G (253)	744	163.9	9.6e-38	gi 143559332 gb EDF63130.1	hypothetical protein G (439)	729	160.9	1.3e-36
gi 140702862 gb ECM93365.1	hypothetical protein G (286)	744	163.9	1.1e-37	gi 134912557 gb EBE25355.1	hypothetical protein G (281)	726	160.2	1.4e-36
gi 138281250 gb EBY78010.1	hypothetical protein G (302)	744	163.9	1.1e-37	gi 138267882 gb EBY68980.1	hypothetical protein G (284)	726	160.2	1.4e-36
gi 139974108 gb ECT74764.1	hypothetical protein G (304)	744	163.9	1.1e-37	gi 140299537 gb ECR81908.1	hypothetical protein G (286)	726	160.2	1.4e-36
gi 143234938 gb EDD79123.1	hypothetical protein G (270)	743	163.7	1.2e-37	gi 239523935 gb EE063801.1	3-phosphoshikimate 1-c (431)	728	160.7	1.5e-36
gi 138290616 gb EBY82177.1	hypothetical protein G (295)	743	163.7	1.3e-37	gi 136822130 gb EBQ63589.1	hypothetical protein G (444)	728	160.7	1.6e-36
gi 142668501 gb ECZ70721.1	hypothetical protein G (334)	743	163.7	1.4e-37	gi 112803452 gb EAU00796.1	3-phosphoshikimate 1-c (424)	727	160.4	1.7e-36
gi 141489620 gb ECS04477.1	hypothetical protein G (301)	742	163.5	1.5e-37	gi 142993753 gb EDC04217.1	hypothetical protein G (275)	724	159.7	1.8e-36
gi 139845582 gb ECH86898.1	hypothetical protein G (305)	742	163.5	1.5e-37	gi 136028828 gb EBU43065.1	hypothetical protein G (409)	726	160.2	1.9e-36
gi 138465274 gb EBE286300.1	hypothetical protein G (214)	739	162.8	1.7e-37	gi 144224364 gb EDJ77028.1	hypothetical protein G (348)	725	160.0	1.9e-36
gi 142767462 gb EDA43227.1	hypothetical protein G (445)	743	163.8	1.8e-37	gi 137891350 gb EBW59332.1	hypothetical protein G (287)	723	159.5	2.2e-36
gi 135744571 gb EBY57515.1	hypothetical protein G (301)	740	163.1	2e-37	gi 142525284 gb ECY70920.1	hypothetical protein G (304)	723	159.5	2.3e-36
gi 140289895 gb ECK77037.1	hypothetical protein G (307)	740	163.1	2e-37	gi 134510091 gb EBB77103.1	hypothetical protein G (264)	722	159.3	2.4e-36
gi 141103301 gb ECP64813.1	hypothetical protein G (309)	740	163.1	2e-37	gi 137383188 gb EBT78926.1	hypothetical protein G (286)	722	159.3	2.5e-36

gi 141523746 gb ECS14701.1	hypothetical protein G (291)	722	159.3	2.6e-36	gi 1138564576 gb ECA47108.1	hypothetical protein G (312)	706	156.0	2.7e-35
gi 139645346 gb ECG48218.1	hypothetical protein G (275)	721	159.1	2.8e-36	gi 1139434088 gb ECR08737.1	hypothetical protein G (287)	705	155.8	2.9e-35
gi 135522926 gb EBI1182.1	hypothetical protein G (293)	721	159.1	3e-36	gi 1142010327 gb ECU080421.1	hypothetical protein G (394)	706	156.1	3.3e-35
gi 135150889 gb EBF81845.1	hypothetical protein G (293)	721	159.1	3e-36	gi 12313507 gb AAD07470.1	3-phosphoshikimate 1-car (429)	706	156.1	3.6e-35
gi 142113139 gb ECV68675.1	hypothetical protein G (416)	723	159.6	3e-36	gi 1210133180 gb ACU08171.1	3-phosphoshikimate 1-c (429)	706	156.1	3.6e-35
gi 142172809 gb ECN10681.1	hypothetical protein G (300)	721	159.1	3e-36	gi 1136044945 gb EBU53876.1	hypothetical protein G (439)	706	156.1	3.7e-35
gi 139742010 gb ECH15842.1	hypothetical protein G (291)	720	158.9	3.4e-36	gi 1135295582 gb EBG69224.1	hypothetical protein G (221)	701	154.9	4.2e-35
gi 134795852 gb EBD49110.1	hypothetical protein G (412)	722	159.4	3.5e-36	gi 1141923650 gb ECU24164.1	hypothetical protein G (278)	702	155.2	4.4e-35
gi 109714282 emb CAJ99290.1	3-phosphoshikimate 1- (429)	722	159.4	3.6e-36	gi 1142551449 gb ECX89791.1	hypothetical protein G (284)	702	155.2	4.5e-35
gi 138415605 gb EBZ51637.1	hypothetical protein G (246)	718	158.5	4e-36	gi 1135312851 gb EBG79579.1	hypothetical protein G (300)	701	155.0	5.4e-35
gi 140237179 gb ECK45858.1	hypothetical protein G (265)	718	158.5	4.2e-36	gi 1139889525 gb ECI15914.1	hypothetical protein G (221)	699	154.5	5.6e-35
gi 142655804 gb ECZ62978.1	hypothetical protein G (388)	720	159.0	4.4e-36	gi 1139189085 gb ECU01980.1	hypothetical protein G (262)	700	154.7	5.6e-35
gi 141829660 gb ECT53963.1	hypothetical protein G (311)	718	158.5	4.8e-36	gi 1140284595 gb ECK74389.1	hypothetical protein G (287)	700	154.8	6e-35
gi 144036682 gb EDI40729.1	hypothetical protein G (312)	718	158.5	4.9e-36	gi 1142271427 gb ECW87239.1	hypothetical protein G (291)	700	154.8	6.1e-35
gi 143683511 gb EDG25599.1	hypothetical protein G (449)	720	159.0	5e-36	gi 1135379194 gb EBR24154.1	hypothetical protein G (443)	702	155.3	6.6e-35
gi 1261839786 gb ACX99551.1	3-phosphoshikimate 1-c (429)	719	158.8	5.5e-36	gi 1134894864 gb EBE13658.1	hypothetical protein G (289)	699	154.5	7e-35
gi 139047127 gb ECD04427.1	hypothetical protein G (259)	715	157.9	6.4e-36	gi 1136833675 gb EB071286.1	hypothetical protein G (413)	701	155.0	7.2e-35
gi 143487900 gb EDF25456.1	hypothetical protein G (443)	718	158.6	6.6e-36	gi 1143151911 gb EDD19366.1	hypothetical protein G (215)	696	153.9	8.4e-35
gi 142554361 gb ECY91840.1	hypothetical protein G (282)	715	157.9	6.9e-36	gi 1268617282 gb ACI11647.1	3-phosphoshikimate 1-c (428)	700	154.8	8.5e-35
gi 136230222 gb EBM75731.1	hypothetical protein G (279)	714	157.7	7.8e-36	gi 1137912650 gb EBW71582.1	hypothetical protein G (271)	696	153.9	1e-34
gi 142520919 gb ECY67749.1	hypothetical protein G (435)	716	158.2	8.6e-36	gi 1143273185 gb EDS05978.1	hypothetical protein G (423)	698	154.4	1.1e-34
gi 118414572 gb ABK82992.1	3-phosphoshikimate 1-c (425)	715	157.9	9.8e-36	gi 1142397546 gb ECX77275.1	hypothetical protein G (437)	698	154.4	1.2e-34
gi 134743795 gb EBD15255.1	hypothetical protein G (283)	712	157.2	1.1e-35	gi 1140715196 gb ECN01656.1	hypothetical protein G (277)	695	153.7	1.2e-34
gi 134831338 gb EBD71836.1	hypothetical protein G (283)	712	157.2	1.1e-35	gi 1136943528 gb EBR31747.1	hypothetical protein G (291)	695	153.7	1.3e-34
gi 137700970 gb EBV3502.1	hypothetical protein G (289)	712	157.3	1.1e-35	gi 1345588341 gb AAQ75178.1	3-phosphoshikimate 1-ca (431)	697	154.2	1.3e-34
gi 135540996 gb EBT30679.1	hypothetical protein G (294)	712	157.3	1.1e-35	gi 1142845608 gb EDB01702.1	hypothetical protein G (443)	697	154.2	1.3e-34
gi 136769707 gb EBQ28730.1	hypothetical protein G (259)	711	157.0	1.1e-35	gi 1135936082 gb EBR82171.1	hypothetical protein G (254)	693	153.3	1.5e-34
gi 261838386 gb ACX98152.1	3-phosphoshikimate 1-c (429)	714	157.7	1.1e-35	gi 1145242470 gb EBR85548.1	hypothetical protein G (302)	694	153.5	1.5e-34
gi 107837189 gb ABF85058.1	3-phosphoshikimate 1-c (429)	714	157.7	1.1e-35	gi 1142032131 gb ECV01025.1	hypothetical protein G (432)	695	153.8	1.8e-34
gi 141103360 gb ECP64854.1	hypothetical protein G (262)	711	157.0	1.1e-35	gi 178166074 gb ABE23172.1	3-phosphoshikimate 1-ca (433)	695	153.8	1.8e-34
gi 135815796 gb EBK02149.1	hypothetical protein G (389)	713	157.5	1.2e-35	gi 1137866498 gb EBW45118.1	hypothetical protein G (278)	692	153.1	1.9e-34
gi 140461717 gb ECL90174.1	hypothetical protein G (208)	709	156.6	1.3e-35	gi 1140201840 gb ECK21774.1	hypothetical protein G (211)	690	152.6	2e-34
gi 14155563 gb AAD06557.1	3-PHOSPHOSHIKIMATE 1-CAR (429)	713	157.5	1.3e-35	gi 1143597077 gb EDF78773.1	hypothetical protein G (439)	694	153.6	2.1e-34
gi 143103963 gb EDC84209.1	hypothetical protein G (262)	710	156.8	1.3e-35	gi 1142744348 gb EDA26459.1	hypothetical protein G (383)	693	153.4	2.1e-34
gi 139513223 gb ECF58552.1	hypothetical protein G (273)	710	156.8	1.4e-35	gi 1140869145 gb ECU05746.1	hypothetical protein G (276)	690	152.7	2.5e-34
gi 142716191 gb EUA06118.1	hypothetical protein G (299)	710	156.8	1.5e-35	gi 1138176812 gb EBY21559.1	hypothetical protein G (292)	690	152.7	2.6e-34
gi 1254001519 emb CAX29537.1	3-phosphoshikimate 1- (429)	712	157.3	1.5e-35	gi 1141310217 gb ECQ97279.1	hypothetical protein G (272)	689	152.5	2.8e-34
gi 140210178 gb ECK27766.1	hypothetical protein G (216)	707	156.2	1.7e-35	gi 1134662035 gb EBG67782.1	hypothetical protein G (298)	689	152.5	3e-34
gi 138144074 gb ACD48491.1	3-phosphoshikimate 1-c (429)	711	157.1	1.8e-35	gi 1136619536 gb EBE32785.1	hypothetical protein G (324)	689	152.5	3.3e-34
gi 1208432878 gb ACI27749.1	3-phosphoshikimate 1-c (429)	711	157.1	1.8e-35	gi 1134922445 gb EBE33193.1	hypothetical protein G (456)	691	153.0	3.3e-34
gi 141113013 gb ECP71635.1	hypothetical protein G (281)	708	156.4	1.9e-35	gi 1135868048 gb EBK35027.1	hypothetical protein G (234)	687	152.0	3.3e-34
gi 142651615 gb ECZ60006.1	hypothetical protein G (423)	710	156.9	2e-35	gi 1136260802 gb EBW96358.1	hypothetical protein G (404)	690	152.7	3.4e-34
gi 138605445 gb ECA75646.1	hypothetical protein G (264)	707	156.2	2e-35	gi 1142629081 gb ECZ44128.1	hypothetical protein G (413)	690	152.7	3.5e-34
gi 137901546 gb EBW65266.1	hypothetical protein G (290)	707	156.2	2.2e-35	gi 1135009399 gb EBE90409.1	hypothetical protein G (216)	686	151.8	3.5e-34
gi 141081650 gb ECP49597.1	hypothetical protein G (247)	706	156.0	2.2e-35	gi 1134888104 gb EBE09153.1	hypothetical protein G (441)	690	152.8	3.7e-34
gi 140841479 gb ECN88442.1	hypothetical protein G (292)	707	156.2	2.2e-35	gi 1140327911 gb ECU101330.1	hypothetical protein G (236)	686	151.8	3.8e-34
gi 137901546 gb EBW65266.1	hypothetical protein G (302)	707	156.2	2.3e-35	gi 1137921162 gb EBW76361.1	hypothetical protein G (304)	687	152.1	4.1e-34
gi 127262190 gb AAN87376.1	3-phosphoshikimate 1-ca (256)	706	156.0	2.3e-35	gi 1141089428 gb ECP54985.1	hypothetical protein G (266)	686	151.8	4.2e-34
gi 142239293 gb ECW63535.1	hypothetical protein G (442)	709	156.7	2.4e-35	gi 1134720376 gb EBD01873.1	hypothetical protein G (255)	685	151.6	4.7e-34
gi 135409824 gb EBH44760.1	hypothetical protein G (450)	709	156.7	2.4e-35	gi 1135875132 gb EBK39974.1	hypothetical protein G (444)	688	152.3	5e-34
gi 135830394 gb EBK11348.1	hypothetical protein G (423)	708	156.5	2.7e-35	gi 1141879530 gb ECT88967.1	hypothetical protein G (278)	685	151.6	5.1e-34

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gi 1377361100 gb EBV72455.1	hypothetical protein G (294)	685	151.6	5.3e-34	gi 141389048 gb ECR48542.1	hypothetical protein G (192)	667	147.8	5e-33
gi 1378127301 gb EBW14044.1	hypothetical protein G (259)	684	151.4	5.5e-34	gi 143516129 gb EDFA41123.1	hypothetical protein G (394)	671	148.8	5.2e-33
gi 138564577 gb ECA74109.1	hypothetical protein G (321)	685	151.7	5.8e-34	gi 138970089 gb EC63836.1	hypothetical protein G (251)	668	148.1	5.4e-33
gi 136572401 gb EBP02753.1	hypothetical protein G (285)	684	151.4	6e-34	gi 137356768 gb EB764139.1	hypothetical protein G (305)	669	148.3	5.5e-33
gi 138825029 gb ECC03218.1	hypothetical protein G (287)	684	151.4	6.1e-34	gi 140971289 gb ECO75475.1	hypothetical protein G (267)	668	148.1	5.7e-33
gi 13836247 gb EBF08483.1	hypothetical protein G (261)	683	151.2	6.4e-34	gi 14586542 gb ECB22942.1	hypothetical protein G (254)	667	147.9	6.3e-33
gi 140055201 gb ECG26753.1	hypothetical protein G (317)	684	151.4	6.6e-34	gi 139351418 gb ECS59394.1	hypothetical protein G (260)	667	147.9	6.4e-33
gi 143162244 gb EDD26590.1	hypothetical protein G (394)	685	151.7	6.9e-34	gi 143636057 gb ECR98691.1	hypothetical protein G (268)	667	147.9	6.6e-33
gi 134355864 gb EBA85489.1	hypothetical protein G (401)	685	151.7	7e-34	gi 143540256 gb ECX81791.1	hypothetical protein G (443)	670	148.6	6.6e-33
gi 135952956 gb EBR93503.1	hypothetical protein G (444)	684	151.5	8.8e-34	gi 137904507 gb EBE866910.1	hypothetical protein G (270)	667	147.9	6.6e-33
gi 135382585 gb EBH26426.1	hypothetical protein G (445)	684	151.5	8.8e-34	gi 134587137 gb EB23302.1	hypothetical protein G (238)	666	147.7	6.9e-33
gi 138197142 gb EBY34330.1	hypothetical protein G (194)	679	150.3	8.9e-34	gi 137316119 gb EB41367.1	hypothetical protein G (265)	666	147.7	7.6e-33
gi 140294305 gb EKC79442.1	hypothetical protein G (210)	679	150.3	9.5e-34	gi 143669852 gb EDB22124.1	hypothetical protein G (441)	668	148.2	8.8e-33
gi 136006587 gb EBL28090.1	hypothetical protein G (304)	681	150.8	9.8e-34	gi 142945309 gb EDB70428.1	hypothetical protein G (330)	665	147.5	1.1e-32
gi 139762490 gb ECH28616.1	hypothetical protein G (258)	680	150.6	9.8e-34	gi 139807489 gb ECH60285.1	hypothetical protein G (208)	662	146.8	1.1e-32
gi 136503636 gb EB058780.1	hypothetical protein G (377)	681	150.9	1.2e-33	gi 135007077 gb EBE88844.1	hypothetical protein G (407)	666	147.8	1.1e-32
gi 140796557 gb ECN57125.1	hypothetical protein G (229)	678	150.1	1.2e-33	gi 152939223 gb AB543964.1	3-phosphoshikimate 1-c (423)	666	147.8	1.1e-32
gi 137877407 gb EBW51396.1	hypothetical protein G (275)	679	150.4	1.2e-33	gi 1368112901 gb EB057436.1	hypothetical protein G (442)	666	147.8	1.2e-32
gi 141425814 gb ECR74107.1	hypothetical protein G (239)	678	150.1	1.2e-33	gi 136798838 gb EB048122.1	hypothetical protein G (227)	662	146.8	1.2e-32
gi 136080841 gb EBL78109.1	hypothetical protein G (285)	679	150.4	1.2e-33	gi 143435399 gb EDB94044.1	hypothetical protein G (443)	666	147.8	1.2e-32
gi 136694506 gb EBP79131.1	hypothetical protein G (288)	679	150.4	1.2e-33	gi 139835846 gb ECH79917.1	hypothetical protein G (269)	663	147.1	1.2e-32
gi 143027028 gb EDC27946.1	hypothetical protein G (443)	681	150.9	1.4e-33	gi 136262713 gb EBM97691.1	hypothetical protein G (388)	665	147.5	1.2e-32
gi 137295367 gb EBT29790.1	hypothetical protein G (269)	678	150.2	1.4e-33	gi 139775304 gb ECH37500.1	hypothetical protein G (292)	663	147.1	1.3e-32
gi 137577482 gb EBU85349.1	hypothetical protein G (233)	677	150.0	1.5e-33	gi 153804313 gb AB551320.1	3-phosphoshikimate 1-c (424)	665	147.6	1.3e-32
gi 135410539 gb EBH45247.1	hypothetical protein G (393)	679	150.5	1.6e-33	gi 1571665281 gb AAW35307.1	3-phosphoshikimate 1-ca (278)	665	147.6	1.3e-32
gi 141725526 gb ECS96576.1	hypothetical protein G (296)	677	150.0	1.7e-33	gi 135835370 gb EBK14477.1	hypothetical protein G (428)	662	146.9	1.3e-32
gi 143179993 gb EDD39182.1	hypothetical protein G (421)	679	150.5	1.7e-33	gi 136331028 gb EBM44134.1	hypothetical protein G (432)	664	147.4	1.5e-32
gi 137706785 gb EBV56572.1	hypothetical protein G (223)	675	149.5	1.8e-33	gi 140352336 gb ECB18584.1	hypothetical protein G (266)	661	146.6	1.6e-32
gi 139539653 gb ECF76318.1	hypothetical protein G (228)	675	149.5	1.8e-33	gi 134346473 gb EBAT9510.1	hypothetical protein G (441)	664	147.4	1.6e-32
gi 134953240 gb EBE52444.1	hypothetical protein G (305)	676	149.8	2e-33	gi 141168333 gb ECQ10384.1	hypothetical protein G (258)	660	146.4	1.8e-32
gi 136286814 gb ERN14262.1	hypothetical protein G (276)	675	149.6	2.1e-33	gi 135879561 gb EBK43089.1	hypothetical protein G (260)	660	146.4	1.8e-32
gi 136080172 gb EBL77651.1	hypothetical protein G (352)	676	149.8	2.3e-33	gi 135306712 gb EBG75775.1	hypothetical protein G (382)	662	146.9	1.8e-32
gi 137723714 gb EBV65818.1	hypothetical protein G (282)	674	149.3	2.4e-33	gi 142505282 gb ECY56360.1	hypothetical protein G (386)	662	146.9	1.9e-32
gi 142251381 gb ECW72468.1	hypothetical protein G (388)	676	149.8	2.4e-33	gi 139374135 gb ECB67784.1	hypothetical protein G (276)	659	146.2	2.1e-32
gi 142131720 gb ECV88212.1	hypothetical protein G (413)	676	149.8	2.6e-33	gi 134797263 gb EBD50100.1	hypothetical protein G (398)	661	146.7	2.2e-32
gi 137473914 gb EBU29669.1	hypothetical protein G (242)	673	149.1	2.5e-33	gi 143183876 gb EDD42018.1	hypothetical protein G (396)	662	146.9	1.9e-32
gi 140986458 gb ECO86073.1	hypothetical protein G (289)	674	149.4	2.6e-33	gi 137852058 gb EBW36821.1	hypothetical protein G (276)	659	146.2	2.1e-32
gi 142131720 gb ECV88212.1	hypothetical protein G (413)	676	149.8	2.6e-33	gi 134797263 gb EBD50100.1	hypothetical protein G (398)	661	146.7	2.2e-32
gi 139939553 gb ECI50387.1	hypothetical protein G (254)	673	149.1	2.7e-33	gi 135390469 gb EBH31737.1	hypothetical protein G (441)	661	146.7	2.4e-32
gi 141443180 gb ECR86430.1	hypothetical protein G (255)	673	149.1	2.7e-33	gi 137457344 gb EBU20973.1	hypothetical protein G (239)	667	145.8	2.5e-32
gi 139973384 gb ECI74252.1	hypothetical protein G (265)	673	149.1	2.8e-33	gi 136053553 gb EBU59732.1	hypothetical protein G (362)	659	146.3	2.7e-32
gi 140047126 gb ECJ22456.1	hypothetical protein G (272)	673	149.1	2.8e-33	gi 144040383 gb EDT43271.1	hypothetical protein G (442)	660	146.5	2.8e-32
gi 142012462 gb ECU82503.1	hypothetical protein G (395)	675	149.6	2.9e-33	gi 143988677 gb EDT06566.1	hypothetical protein G (218)	655	145.3	3.1e-32
gi 142131720 gb ECV88212.1	hypothetical protein G (413)	676	149.8	2.6e-33	gi 112360221 emb CAL35016.1	3-phosphoshikimate 1- (428)	659	146.3	3.1e-32
gi 143907191 gb EDH48930.1	hypothetical protein G (418)	674	149.4	3.5e-33	gi 136808575 gb EB054561.1	hypothetical protein G (442)	659	146.3	3.2e-32
gi 138520674 gb ECA16304.1	hypothetical protein G (265)	671	148.7	3.7e-33	gi 135009040 gb EBE90157.1	hypothetical protein G (395)	658	146.1	3.4e-32
gi 138932794 gb ECC47942.1	hypothetical protein G (272)	671	148.7	3.8e-33	gi 142813782 gb EDAT77762.1	hypothetical protein G (433)	658	146.1	3.7e-32
gi 143099253 gb EDC80882.1	hypothetical protein G (274)	671	148.7	3.8e-33	gi 13789403 gb EDG79192.1	hypothetical protein G (407)	657	145.9	4e-32
gi 139543375 gb ECF78911.1	hypothetical protein G (236)	670	148.5	3.8e-33	gi 141975165 gb EBU525743.1	hypothetical protein G (254)	654	145.2	4.1e-32
gi 142970879 gb EDB88270.1	hypothetical protein G (239)	670	148.5	4.7e-33	gi 121504279 gb EAQ72379.2	3-phosphoshikimate 1-c (423)	657	145.9	4.1e-32
gi 135658881 gb EBJ04539.1	hypothetical protein G (262)	669	148.3	4.9e-33	gi 135461960 gb EBH79689.1	hypothetical protein G (258)	654	145.2	4.2e-32

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gi 143680111 gb EDG23778.1	hypothetical protein G (443)	657	145.9	4.3e-32	gi 142280802 gb ECW94104.1	hypothetical protein G (280)	640	142.3	3.4e-31
gi 143598405 gb EDF79423.1	hypothetical protein G (394)	656	145.7	4.5e-32	gi 134781214 gb EBB038889.1	hypothetical protein G (352)	641	142.5	3.5e-31
gi 139088179 gb ECD3216.1	hypothetical protein G (239)	653	145.0	4.5e-32	gi 135690666 gb EBJ24138.1	hypothetical protein G (283)	649	142.1	3.9e-31
gi 142675360 gb ECF76848.1	hypothetical protein G (395)	656	145.7	4.5e-32	gi 138043293 gb EBX43263.1	hypothetical protein G (306)	639	142.1	4.2e-31
gi 142684538 gb ECZ83443.1	hypothetical protein G (293)	654	145.2	4.6e-32	gi 134787001 gb EBD42903.1	hypothetical protein G (265)	638	141.9	4.3e-31
gi 135845413 gb EBK20780.1	hypothetical protein G (213)	652	144.7	4.7e-32	gi 134976758 gb EBB68251.1	hypothetical protein G (386)	640	142.3	4.4e-31
gi 138398823 gb EBZ39594.1	hypothetical protein G (274)	653	144.7	4.7e-32	gi 137927226 gb EBB77238.1	hypothetical protein G (281)	638	141.9	4.5e-31
gi 141732305 gb ECT00772.1	hypothetical protein G (300)	653	145.0	5.1e-32	gi 135275881 gb EBB57715.1	hypothetical protein G (204)	636	141.4	4.5e-31
gi 140820936 gb ECT74293.1	hypothetical protein G (215)	651	144.5	5.5e-32	gi 140822463 gb ECN75406.1	hypothetical protein G (229)	636	141.4	5e-31
gi 141934358 gb ECU74767.1	hypothetical protein G (262)	652	144.8	5.6e-32	gi 137358507 gb EBT65149.1	hypothetical protein G (271)	637	141.7	5e-31
gi 144114347 gb EDI96759.1	hypothetical protein G (511)	656	145.7	5.6e-32	gi 137110893 gb EBB526319.1	hypothetical protein G (278)	637	141.7	5.1e-31
gi 139557236 gb ECF88763.1	hypothetical protein G (288)	652	144.8	6.1e-32	gi 139743346 gb ECB16606.1	hypothetical protein G (215)	635	141.2	5.5e-31
gi 139734911 gb ECH10883.1	hypothetical protein G (218)	650	144.3	6.4e-32	gi 136359784 gb EBM63723.1	hypothetical protein G (255)	636	141.4	5.5e-31
gi 139005441 gb ECF75437.1	hypothetical protein G (261)	651	144.6	6.5e-32	gi 141859518 gb ECB75045.1	hypothetical protein G (265)	636	141.4	5.7e-31
gi 139498116 gb ECF48108.1	hypothetical protein G (310)	652	144.8	6.5e-32	gi 2070883516 gb ED60942.1	3-phosphoshikimate 1-c	639	142.2	5.7e-31
gi 143179362 gb EDD38720.1	hypothetical protein G (441)	654	145.3	6.6e-32	gi 135487726 gb EBH96571.1	hypothetical protein G (381)	638	141.9	5.8e-31
gi 143388359 gb EDF69270.1	hypothetical protein G (272)	651	144.6	6.7e-32	gi 135846862 gb EBK21692.1	hypothetical protein G (387)	638	141.9	5.9e-31
gi 138689266 gb ECB32856.1	hypothetical protein G (277)	651	144.6	6.8e-32	gi 140501840 gb ECM03625.1	hypothetical protein G (284)	636	141.5	6e-31
gi 140394932 gb ECB6014.1	hypothetical protein G (267)	650	144.3	7.6e-32	gi 135666846 gb EBJ09495.1	hypothetical protein G (249)	635	141.2	6.2e-31
gi 140994978 gb ECO92196.1	hypothetical protein G (213)	648	143.9	8.4e-32	gi 136407897 gb EBN96812.1	hypothetical protein G (213)	634	141.0	6.3e-31
gi 140268029 gb ECK67239.1	hypothetical protein G (214)	648	143.9	8.4e-32	gi 135721677 gb EBU43342.1	hypothetical protein G (361)	637	141.7	6.4e-31
gi 141883047 gb ECT91467.1	hypothetical protein G (257)	649	144.1	8.5e-32	gi 143495182 gb EDF30165.1	hypothetical protein G (390)	637	141.7	6.9e-31
gi 143460504 gb EDF09805.1	hypothetical protein G (384)	651	144.6	9e-32	gi 141235790 gb ECB56283.1	hypothetical protein G (244)	634	141.0	7.1e-31
gi 139635959 gb ECG41765.1	hypothetical protein G (249)	648	143.9	9.6e-32	gi 143253346 gb EDD91725.1	hypothetical protein G (249)	634	141.0	7.2e-31
gi 134796922 gb EDB49853.1	hypothetical protein G (299)	649	144.2	9.7e-32	gi 142795846 gb ECB4359.1	hypothetical protein G (403)	636	141.5	8.2e-31
gi 138675605 gb ECB23156.1	hypothetical protein G (300)	649	144.2	9.7e-32	gi 141580814 gb ECB46000.1	hypothetical protein G (250)	633	140.8	8.3e-31
gi 134579288 gb EBC18564.1	hypothetical protein G (222)	647	143.7	1e-31	gi 136098922 gb EBJ90401.1	hypothetical protein G (413)	636	141.5	8.3e-31
gi 140310782 gb ECQ97441.1	hypothetical protein G (276)	648	143.9	1e-31	gi 141370926 gb ECB35647.1	hypothetical protein G (258)	633	140.8	8.6e-31
gi 140306938 gb ECK86704.1	hypothetical protein G (289)	648	143.9	1.1e-31	gi 142223275 gb ECW51657.1	hypothetical protein G (439)	636	141.5	8.8e-31
gi 139645545 gb ECG48352.1	hypothetical protein G (259)	647	143.7	1.1e-31	gi 141225948 gb ECQ49886.1	hypothetical protein G (270)	633	140.8	8.9e-31
gi 138280102 gb EBY77418.1	hypothetical protein G (268)	647	143.7	1.2e-31	gi 137316621 gb EBT41642.1	hypothetical protein G (296)	633	140.8	9.6e-31
gi 138196756 gb EBY34068.1	hypothetical protein G (263)	646	143.5	1.3e-31	gi 137070063 gb EBB03773.1	hypothetical protein G (298)	633	140.8	9.7e-31
gi 134704854 gb EBC93118.1	hypothetical protein G (242)	645	143.3	1.4e-31	gi 137335226 gb EBT51972.1	hypothetical protein G (276)	632	140.6	1e-30
gi 157386116 gb ABV52431.1	3-phosphoshikimate 1-c	648	144.0	1.5e-31	gi 135856354 gb EBK27680.1	hypothetical protein G (408)	634	141.1	1.1e-30
gi 18957781 emb CAA61554.1	5-enolpyruvylshikimate	648	144.0	1.5e-31	gi 143245592 gb EDD86275.1	hypothetical protein G (435)	634	141.1	1.2e-30
gi 142537980 gb ECY80156.1	hypothetical protein G (442)	648	144.0	1.6e-31	gi 141856808 gb ECT73158.1	hypothetical protein G (265)	631	140.4	1.2e-30
gi 143980116 gb EDI00633.1	hypothetical protein G (379)	647	143.8	1.6e-31	gi 138656624 gb ECB09665.1	hypothetical protein G (305)	631	140.4	1.3e-30
gi 142143916 gb ECY91266.1	hypothetical protein G (182)	642	142.6	1.7e-31	gi 141237285 gb ECQ57366.1	hypothetical protein G (200)	628	139.7	1.4e-30
gi 140945922 gb ECO57780.1	hypothetical protein G (255)	644	143.1	1.7e-31	gi 143886715 gb EDB34407.1	hypothetical protein G (441)	632	140.7	1.6e-30
gi 143510567 gb EDF38097.1	hypothetical protein G (307)	645	143.3	1.8e-31	gi 139108648 gb ECB47280.1	hypothetical protein G (272)	629	140.7	1.6e-30
gi 136620139 gb EBP33148.1	hypothetical protein G (271)	644	143.1	1.8e-31	gi 135216672 gb EBG22887.1	hypothetical protein G (166)	626	139.3	1.6e-30
gi 137180732 gb EBB56545.1	hypothetical protein G (215)	641	142.4	2.3e-31	gi 137078632 gb EBB08614.1	hypothetical protein G (199)	627	139.5	1.6e-30
gi 134887599 gb EBE08816.1	hypothetical protein G (440)	645	143.4	2.4e-31	gi 141882967 gb ECT91409.1	hypothetical protein G (236)	628	139.8	1.6e-30
gi 139689782 gb ECG79632.1	hypothetical protein G (240)	641	142.5	2.5e-31	gi 143115386 gb ECB926275.1	hypothetical protein G (409)	631	140.5	1.7e-30
gi 138251002 gb EBY57235.1	hypothetical protein G (260)	641	142.5	2.7e-31	gi 140055200 gb ECJ26752.1	hypothetical protein G (180)	626	139.3	1.7e-30
gi 140473337 gb ECL94305.1	hypothetical protein G (262)	641	142.5	2.7e-31	gi 137898190 gb EBW63309.1	hypothetical protein G (268)	628	139.8	1.8e-30
gi 137295054 gb EBT29629.1	hypothetical protein G (281)	641	142.5	2.9e-31	gi 142296833 gb ECX03822.1	hypothetical protein G (403)	630	140.3	1.9e-30
gi 137002628 gb EBB65772.1	hypothetical protein G (286)	641	142.5	3e-31	gi 141718414 gb ECB92174.1	hypothetical protein G (356)	628	139.8	2.3e-30
gi 137369411 gb EBT71302.1	hypothetical protein G (243)	640	142.3	3e-31	gi 136926330 gb EBB22646.1	hypothetical protein G (328)	627	139.6	2.5e-30
gi 141387612 gb ECR47580.1	hypothetical protein G (221)	639	142.0	3.2e-31	gi 143186318 gb EDB43806.1	hypothetical protein G (333)	627	139.6	2.5e-30
gi 135292728 gb EBG67583.1	hypothetical protein G (447)	643	143.0	3.3e-31	gi 142343455 gb ECX40449.1	hypothetical protein G (351)	627	139.6	2.7e-30

gi 1399442801 gb ECI53440.1	hypothetical protein G (263)	625	139.2	2.8e-30	gi 142886453 gb EDB28141.1	hypothetical protein G (379)	610	136.1	3.3e-29	
gi 143465264 gb EDF12656.1	hypothetical protein G (377)	626	139.4	3.3e-30	gi 135644105 gb EBI95407.1	hypothetical protein G (276)	608	135.6	3.3e-29	
gi 134508435 gb EBB76121.1	hypothetical protein G (272)	624	138.9	3.3e-30	gi 143113848 gb EDC91473.1	hypothetical protein G (334)	609	135.9	3.4e-29	
gi 139929141 gb ECI43695.1	hypothetical protein G (272)	624	138.9	3.3e-30	gi 140209892 gb ECK27558.1	hypothetical protein G (210)	606	135.2	3.5e-29	
gi 141034040 gb ECP17849.1	hypothetical protein G (272)	624	138.9	3.3e-30	gi 138372334 gb EBZ221784.1	hypothetical protein G (261)	607	135.4	3.7e-29	
gi 141181800 gb EOC19627.1	hypothetical protein G (248)	623	138.7	3.5e-30	gi 144041930 gb EDI4427.1	hypothetical protein G (441)	610	136.1	3.7e-29	
gi 139450633 gb ECF18656.1	hypothetical protein G (261)	623	138.7	3.7e-30	gi 142731161 gb EDA16839.1	hypothetical protein G (379)	609	135.9	3.8e-29	
gi 142618019 gb ECZ36310.1	hypothetical protein G (276)	623	138.7	3.8e-30	gi 141349373 gb ECR20756.1	hypothetical protein G (247)	606	135.2	4e-29	
gi 135008910 gb EBE90069.1	hypothetical protein G (431)	625	139.2	4.2e-30	gi 135303110 gb EBG73663.1	hypothetical protein G (300)	607	135.4	4.1e-29	
gi 135301778 gb EBG72877.1	hypothetical protein G (346)	623	138.8	4.7e-30	gi 138288446 gb EBY80873.1	hypothetical protein G (259)	606	135.2	4.2e-29	
gi 138733010 gb ECB63289.1	hypothetical protein G (267)	621	138.3	5e-30	gi 134722639 gb EBD03170.1	hypothetical protein G (276)	605	135.0	5.1e-29	
gi 143710497 gb EDG39549.1	hypothetical protein G (439)	623	138.8	5.7e-30	gi 139146426 gb ECD72028.1	hypothetical protein G (284)	605	135.0	5.3e-29	
gi 136294048 gb EBN19181.1	hypothetical protein G (281)	620	138.1	6e-30	gi 143837477 gb EDG98597.1	hypothetical protein G (252)	603	134.6	6.3e-29	
gi 139100964 gb ECD41990.1	hypothetical protein G (263)	619	137.9	6.5e-30	gi 143644718 gb EDG03752.1	hypothetical protein G (253)	603	134.6	6.3e-29	
gi 140415147 gb ECL60719.1	hypothetical protein G (275)	619	137.9	6.8e-30	gi 143509391 gb EDF37468.1	hypothetical protein G (363)	605	135.1	6.5e-29	
gi 139248676 gb ECB35811.1	hypothetical protein G (200)	617	137.4	6.9e-30	gi 142445939 gb ECY13527.1	hypothetical protein G (199)	600	133.9	7.9e-29	
gi 143916848 gb EDH55629.1	hypothetical protein G (339)	620	138.2	7.1e-30	gi 71062313 gb AAZ21316.1	3-phosphoshikimate 1-ca	(395)	604	134.9	8.1e-29
gi 29727034 gb AAD47362.2 AF038578.5 cyclonexadien	(505)	622	138.7	7.5e-30	gi 1432449054 gb EDD88694.1	hypothetical protein G (344)	603	134.6	8.3e-29	
gi 136976536 gb EBR50991.1	hypothetical protein G (309)	618	137.7	8.7e-30	gi 134563621 gb EBC09100.1	hypothetical protein G (348)	602	134.4	9.6e-29	
gi 141216849 gb ECO42758.1	hypothetical protein G (263)	617	137.5	8.7e-30	gi 136317320 gb EBN34967.1	hypothetical protein G (349)	602	134.4	9.7e-29	
gi 136637387 gb EBP43347.1	hypothetical protein G (230)	616	137.3	9e-30	gi 143387950 gb EDB69059.1	hypothetical protein G (364)	602	134.4	1e-28	
gi 141067369 gb ECP39770.1	hypothetical protein G (206)	615	137.0	9.4e-30	gi 144034658 gb EDI39332.1	hypothetical protein G (222)	599	133.7	1e-28	
gi 136480496 gb EBO43798.1	hypothetical protein G (404)	619	138.0	9.5e-30	gi 142973874 gb EDB90380.1	hypothetical protein G (374)	602	134.4	1e-28	
gi 142392190 gb ECX73356.1	hypothetical protein G (299)	617	137.5	9.7e-30	gi 134915661 gb EBE27413.1	hypothetical protein G (279)	600	134.0	1.1e-28	
gi 135475610 gb EBH88835.1	hypothetical protein G (279)	616	137.3	1.1e-29	gi 142353791 gb ECX47379.1	hypothetical protein G (253)	599	133.7	1.1e-28	
gi 143914669 gb EDH54067.1	hypothetical protein G (392)	618	137.8	1.1e-29	gi 141519084 gb ECJ13650.1	hypothetical protein G (195)	597	133.3	1.2e-28	
gi 134425336 gb EBB27523.1	hypothetical protein G (294)	616	137.3	1.1e-29	gi 134407016 gb EBB16951.1	hypothetical protein G (276)	599	133.8	1.2e-28	
gi 135575756 gb EBT52970.1	hypothetical protein G (162)	612	136.4	1.2e-29	gi 135723033 gb EBJ44194.1	hypothetical protein G (367)	600	134.0	1.3e-28	
gi 134326213 gb EBA65879.1	hypothetical protein G (271)	615	137.1	1.2e-29	gi 135016962 gb EBE95506.1	hypothetical protein G (377)	600	134.0	1.4e-28	
gi 139402158 gb ECE86608.1	hypothetical protein G (239)	614	136.8	1.2e-29	gi 140834228 gb ECN83709.1	hypothetical protein G (234)	597	133.3	1.4e-28	
gi 143744226 gb EDG56728.1	hypothetical protein G (398)	617	137.6	1.2e-29	gi 136764304 gb EBQ25053.1	hypothetical protein G (405)	600	134.0	1.5e-28	
gi 135189091 gb EBG06240.1	hypothetical protein G (244)	614	136.8	1.3e-29	gi 135033042 gb EBF06409.1	hypothetical protein G (382)	599	133.8	1.6e-28	
gi 139179376 gb ECD95073.1	hypothetical protein G (247)	614	136.9	1.3e-29	gi 139809562 gb ECH61775.1	hypothetical protein G (236)	596	133.1	1.6e-28	
gi 143681911 gb EDG24746.1	hypothetical protein G (376)	616	137.4	1.4e-29	gi 135169736 gb EBF93991.1	hypothetical protein G (337)	598	133.6	1.7e-28	
gi 137007600 gb EBR68605.1	hypothetical protein G (199)	612	136.4	1.4e-29	gi 138544954 gb ECA33332.1	hypothetical protein G (281)	596	133.1	1.9e-28	
gi 138396080 gb EBZ37708.1	hypothetical protein G (279)	614	136.9	1.4e-29	gi 135462160 gb EBH79820.1	hypothetical protein G (241)	595	132.9	1.9e-28	
gi 143823139 gb EDG68251.1	hypothetical protein G (206)	612	136.4	1.5e-29	gi 141387610 gb ECR47578.1	hypothetical protein G (286)	596	133.1	1.9e-28	
gi 143594271 gb EDF76017.1	hypothetical protein G (381)	615	137.1	1.6e-29	gi 140430189 gb ECJ69708.1	hypothetical protein G (249)	595	132.9	2e-28	
gi 135328530 gb EBG90150.1	hypothetical protein G (341)	614	136.9	1.7e-29	gi 135735463 gb EBJ51874.1	hypothetical protein G (270)	595	132.9	2.1e-28	
gi 143227632 gb EDD73899.1	hypothetical protein G (346)	614	136.9	1.7e-29	gi 140007059 gb ECI96257.1	hypothetical protein G (226)	593	132.5	2.4e-28	
gi 136662556 gb EBF58336.1	hypothetical protein G (190)	610	136.0	1.8e-29	gi 141198878 gb ECQ30289.1	hypothetical protein G (227)	593	132.5	2.4e-28	
gi 139012268 gb ECC79849.1	hypothetical protein G (277)	611	136.3	2.2e-29	gi 140711280 gb ECW98898.1	hypothetical protein G (228)	593	132.5	2.4e-28	
gi 143764419 gb EDG66830.1	hypothetical protein G (335)	612	136.5	2.2e-29	gi 138799428 gb ECB91382.1	hypothetical protein G (302)	594	132.7	2.7e-28	
gi 222539413 gb ACM64514.1	3-phosphoshikimate 1-c	(428)	613	136.8	2.4e-29	gi 142782139 gb EDA54172.1	hypothetical protein G (227)	597	132.3	2.8e-28
gi 143718994 gb EDG43389.1	hypothetical protein G (379)	612	136.5	2.5e-29	gi 138307154 gb EBY90044.1	hypothetical protein G (233)	592	132.3	2.9e-28	
gi 140907696 gb ECO31017.1	hypothetical protein G (282)	610	136.0	2.5e-29	gi 140995634 gb ECB092668.1	hypothetical protein G (171)	590	131.8	2.9e-28	
gi 137284545 gb EBT23794.1	hypothetical protein G (271)	609	135.8	2.8e-29	gi 134426111 gb EBB27979.1	hypothetical protein G (309)	593	132.5	3.2e-28	
gi 139332513 gb ECE53914.1	hypothetical protein G (273)	609	135.8	2.9e-29	gi 134961005 gb EBE57619.1	hypothetical protein G (270)	592	132.3	3.3e-28	
gi 134855060 gb EBD87065.1	hypothetical protein G (394)	611	136.3	2.9e-29	gi 141691249 gb ECS83238.1	hypothetical protein G (167)	589	131.6	3.3e-28	
gi 142204276 gb ECW37281.1	hypothetical protein G (249)	608	135.6	3e-29	gi 136211953 gb EBM63336.1	hypothetical protein G (310)	592	132.3	3.7e-28	
gi 139891102 gb ECI17002.1	hypothetical protein G (218)	607	135.4	3.1e-29	gi 140624511 gb ECM41483.1	hypothetical protein G (232)	590	131.9	3.8e-28	

gi 137824042 gb EBW20669.1	hypothetical protein G (203)	589	131.6	3.9e-28	gi 137512952 gb EBU49685.1	hypothetical protein G (231)	577	129.1	2.5e-27
gi 139811438 gb ECH63106.1	hypothetical protein G (241)	590	131.9	4e-28	gi 134492839 gb EBB67196.1	hypothetical protein G (258)	577	129.2	2.7e-27
gi 1427211012 gb EDA09566.1	hypothetical protein G (424)	593	132.6	4.2e-28	gi 138858289 gb EC17909.1	hypothetical protein G (275)	577	129.2	2.9e-27
gi 47250293 gb AAT20236.1	Sequence 1608 from pate (309)	591	132.1	4.2e-28	gi 143058690 gb EDC51173.1	hypothetical protein G (257)	576	129.0	3.1e-27
gi 135649501 gb EBI98752.1	hypothetical protein G (371)	592	132.4	4.3e-28	gi 136253248 gb EBM91261.1	hypothetical protein G (304)	577	129.2	3.1e-27
gi 141720170 gb ECS93268.1	hypothetical protein G (346)	591	132.1	4.7e-28	gi 113132797 gb ECR585624.1	hypothetical protein G (322)	577	129.2	3.3e-27
gi 135901397 gb EBK58395.1	hypothetical protein G (223)	588	131.4	4.9e-28	gi 134492761 gb EBB67150.1	hypothetical protein G (205)	574	128.5	3.4e-27
gi 137342847 gb EBR56305.1	hypothetical protein G (272)	589	131.7	5.1e-28	gi 142019072 gb ECU88872.1	hypothetical protein G (248)	575	128.7	3.5e-27
gi 140677547 gb ECM75559.1	hypothetical protein G (237)	588	131.4	5.2e-28	gi 138387052 gb EBX31733.1	hypothetical protein G (294)	576	129.0	3.5e-27
gi 135393586 gb EBH33843.1	hypothetical protein G (379)	590	131.9	5.8e-28	gi 134347423 gb EBA80130.1	hypothetical protein G (359)	577	129.2	3.6e-27
gi 143372153 gb EDF62339.1	hypothetical protein G (438)	590	132.0	6.6e-28	gi 141338252 gb ECR14195.1	hypothetical protein G (265)	575	128.8	3.7e-27
gi 137160598 gb EBS54177.1	hypothetical protein G (225)	586	131.0	6.6e-28	gi 141933579 gb ECQ28286.1	hypothetical protein G (164)	572	128.0	3.8e-27
gi 135428951 gb EBH57631.1	hypothetical protein G (227)	586	131.0	6.7e-28	gi 139715639 gb ECG97589.1	hypothetical protein G (197)	573	128.3	3.8e-27
gi 141272822 gb ECQ82078.1	hypothetical protein G (278)	587	131.3	6.9e-28	gi 136318277 gb EBM35598.1	hypothetical protein G (325)	576	129.0	3.8e-27
gi 135744269 gb EBU57327.1	hypothetical protein G (285)	587	131.3	7e-28	gi 140780154 gb ECN45628.1	hypothetical protein G (245)	574	128.5	4e-27
gi 139450953 gb ECF18884.1	hypothetical protein G (252)	586	131.0	7.3e-28	gi 140265299 gb ECR65294.1	hypothetical protein G (178)	572	128.1	4.1e-27
gi 142804270 gb EDA70643.1	hypothetical protein G (256)	586	131.0	7.4e-28	gi 136290187 gb EBM1655.1	hypothetical protein G (258)	574	128.5	4.2e-27
gi 141418805 gb ECR69222.1	hypothetical protein G (257)	586	131.0	7.4e-28	gi 141308402 gb ECQ96556.1	hypothetical protein G (258)	574	128.5	4.2e-27
gi 144126252 gb EDJ05420.1	hypothetical protein G (233)	585	130.8	7.9e-28	gi 141109595 gb ECF69313.1	hypothetical protein G (187)	572	128.1	4.2e-27
gi 139383908 gb ECE74599.1	hypothetical protein G (201)	584	130.6	8e-28	gi 1436335271 gb EDF98232.1	hypothetical protein G (375)	576	129.0	4.4e-27
gi 135544424 gb EBT32879.1	hypothetical protein G (396)	588	131.5	8.1e-28	gi 136929793 gb EBR24575.1	hypothetical protein G (270)	574	128.6	4.4e-27
gi 139799834 gb ECH54843.1	hypothetical protein G (254)	585	130.8	8.5e-28	gi 135208488 gb EBG18075.1	hypothetical protein G (230)	573	128.3	4.4e-27
gi 137230117 gb EBS93243.1	hypothetical protein G (236)	584	130.6	9.2e-28	gi 139479977 gb ECF36832.1	hypothetical protein G (233)	573	128.3	4.4e-27
gi 138264744 gb EBY66746.1	hypothetical protein G (221)	583	130.4	1e-27	gi 144118385 gb EDJ99657.1	hypothetical protein G (344)	575	128.8	4.7e-27
gi 137600689 gb EBU98255.1	hypothetical protein G (198)	582	130.2	1.1e-27	gi 138473826 gb EBZ92124.1	hypothetical protein G (187)	571	127.9	4.9e-27
gi 137606050 gb EBY01280.1	hypothetical protein G (235)	583	130.4	1.1e-27	gi 138410663 gb EBY48146.1	hypothetical protein G (221)	572	128.1	4.9e-27
gi 135468157 gb EBH83851.1	hypothetical protein G (343)	585	130.9	1.1e-27	gi 139208262 gb ECB13862.1	hypothetical protein G (225)	572	128.1	5e-27
gi 129197803 gb ECE08220.1	hypothetical protein G (250)	583	130.4	1.1e-27	gi 136438974 gb EBM016938.1	hypothetical protein G (254)	572	128.1	5.5e-27
gi 120905696 gb AAM30934.1	3-phosphoshikimate 1-ca (430)	586	131.1	1.2e-27	gi 140760372 gb ECN33022.1	hypothetical protein G (188)	570	127.7	5.7e-27
gi 161726859 emb CAP47299.1	unnamed protein produ (430)	586	131.1	1.2e-27	gi 140425672 gb ECU67335.1	hypothetical protein G (252)	571	127.9	6.3e-27
gi 197053761 gb ACH25459.1	Sequence 11 from paten (430)	586	131.1	1.2e-27	gi 139040218 gb ECC99544.1	hypothetical protein G (258)	571	127.9	6.5e-27
gi 138511461 gb ECA10116.1	hypothetical protein G (262)	583	130.4	1.2e-27	gi 140296649 gb ECR80535.1	hypothetical protein G (267)	571	127.9	6.7e-27
gi 142626295 gb ECZ42151.1	hypothetical protein G (270)	583	130.4	1.2e-27	gi 141975411 gb ECU55913.1	hypothetical protein G (246)	570	127.7	7.2e-27
gi 135500999 gb EBT05114.1	hypothetical protein G (325)	584	130.7	1.2e-27	gi 136884800 gb EBR04358.1	hypothetical protein G (184)	568	127.2	7.5e-27
gi 142202639 gb ECM36029.1	hypothetical protein G (236)	582	130.2	1.2e-27	gi 142623014 gb ECZ39816.1	hypothetical protein G (333)	571	128.0	8.1e-27
gi 140948059 gb ECO59318.1	hypothetical protein G (222)	581	130.0	1.3e-27	gi 139492061 gb ECF43960.1	hypothetical protein G (205)	568	127.3	8.2e-27
gi 135169737 gb EBF93992.1	hypothetical protein G (317)	583	130.5	1.4e-27	gi 143225744 gb EDD72527.1	hypothetical protein G (346)	571	128.0	8.3e-27
gi 137232547 gb EBS94634.1	hypothetical protein G (237)	581	130.0	1.4e-27	gi 139119268 gb ECU54583.1	hypothetical protein G (249)	569	127.5	8.4e-27
gi 142266870 gb ECW83884.1	hypothetical protein G (185)	579	129.5	1.5e-27	gi 136616380 gb EBP30906.1	hypothetical protein G (354)	571	128.0	8.5e-27
gi 137557613 gb EBU74085.1	hypothetical protein G (192)	579	129.5	1.5e-27	gi 139865703 gb ECU00815.1	hypothetical protein G (254)	568	127.5	8.5e-27
gi 141393185 gb ECR51347.1	hypothetical protein G (271)	581	130.0	1.6e-27	gi 139687054 gb ECG77816.1	hypothetical protein G (217)	568	127.3	8.6e-27
gi 139040947 gb ECD00081.1	hypothetical protein G (204)	579	129.5	1.7e-27	gi 134872290 gb EBD98647.1	hypothetical protein G (383)	571	128.0	9.1e-27
gi 136231925 gb EBN76868.1	hypothetical protein G (230)	579	129.6	1.9e-27	gi 136075621 gb EBL74549.1	hypothetical protein G (396)	571	128.0	9.4e-27
gi 136346125 gb EBN54406.1	hypothetical protein G (228)	578	129.4	2.1e-27	gi 135964875 gb EBJ01570.1	hypothetical protein G (339)	570	127.8	9.5e-27
gi 136568435 gb EBP00216.1	hypothetical protein G (379)	581	130.1	2.1e-27	gi 140139580 gb ECJ80221.1	hypothetical protein G (184)	566	126.8	9.9e-27
gi 137068138 gb EBS02685.1	hypothetical protein G (198)	577	129.1	2.2e-27	gi 138159520 gb EBY09503.1	hypothetical protein G (227)	567	127.1	1e-26
gi 136184878 gb EBN45270.1	hypothetical protein G (202)	577	129.1	2.2e-27	gi 142653024 gb ECB61002.1	hypothetical protein G (229)	567	127.1	1e-26
gi 136609934 gb EBP26903.1	hypothetical protein G (394)	581	130.1	2.2e-27	gi 143392869 gb EDF71678.1	hypothetical protein G (331)	569	127.6	1.1e-26
gi 144114617 gb EBD196951.1	hypothetical protein G (245)	578	129.4	2.3e-27	gi 133377215 gb EBH22814.1	hypothetical protein G (340)	569	127.6	1.1e-26
gi 136484986 gb EBO46689.1	hypothetical protein G (259)	578	129.4	2.4e-27	gi 142389451 gb ECX71311.1	hypothetical protein G (247)	567	127.1	1.1e-26
gi 135790786 gb EBJ86387.1	hypothetical protein G (225)	577	129.1	2.4e-27	gi 137889824 gb EBW58476.1	hypothetical protein G (260)	567	127.1	1.2e-26

gi 1343339575 gb EBA74899.1	hypothetical protein G (199)	565	126.6	1.2e-26	gi 138798250 gb ECB90802.1	hypothetical protein G (239)	555	124.6	6.1e-26
gi 135121196 gb EBF62739.1	hypothetical protein G (199)	565	126.6	1.2e-26	gi 140882192 gb ECOL4647.1	hypothetical protein G (183)	553	124.1	6.4e-26
gi 143038670 gb EDC63519.1	hypothetical protein G (389)	569	127.6	1.2e-26	gi 135373751 gb EBH20476.1	hypothetical protein G (359)	557	125.1	6.5e-26
gi 134863258 gb EBD92485.1	hypothetical protein G (172)	564	126.4	1.3e-26	gi 139196107 gb ECB07005.1	hypothetical protein G (218)	554	124.4	6.5e-26
gi 140309242 gb ECK88285.1	hypothetical protein G (285)	567	127.1	1.3e-26	gi 136321702 gb EBR37871.1	hypothetical protein G (322)	556	124.9	6.8e-26
gi 135914634 gb EBK67553.1	hypothetical protein G (250)	566	126.9	1.3e-26	gi 137023050 gb EBR77234.1	hypothetical protein G (197)	553	124.1	6.9e-26
gi 138424579 gb EBZ57865.1	hypothetical protein G (257)	566	126.9	1.3e-26	gi 137920165 gb EBW75787.1	hypothetical protein G (200)	553	124.1	7e-26
gi 137468525 gb EBU26841.1	hypothetical protein G (240)	565	126.7	1.4e-26	gi 135576705 gb EBE53580.1	hypothetical protein G (346)	556	124.9	7.2e-26
gi 143691937 gb EDG30929.1	hypothetical protein G (336)	567	127.1	1.4e-26	gi 143557400 gb EBE62509.1	hypothetical protein G (254)	554	124.4	7.4e-26
gi 136969398 gb EBR46933.1	hypothetical protein G (213)	564	126.4	1.5e-26	gi 198037329 emb CAR53255.1	3-phosphoshikimate 1- (434)	557	125.1	7.6e-26
gi 1345511651 gb EBC01843.1	hypothetical protein G (326)	566	126.9	1.6e-26	gi 169815598 gb ACA90181.1	3-phosphoshikimate 1-c (434)	557	124.2	7.9e-26
gi 142551184 gb ECY89604.1	hypothetical protein G (290)	565	126.7	1.8e-26	gi 137968623 gb EBX03144.1	hypothetical protein G (233)	553	125.1	7.9e-26
gi 142423272 gb ECX96633.1	hypothetical protein G (259)	564	126.5	1.8e-26	gi 143843065 gb EDH02621.1	hypothetical protein G (387)	556	124.9	8e-26
gi 143371316 gb EDE61828.1	hypothetical protein G (260)	564	126.5	1.8e-26	gi 135893800 gb EBR53064.1	hypothetical protein G (207)	552	123.9	8.3e-26
gi 138340797 gb EBZ07170.1	hypothetical protein G (188)	562	126.0	1.8e-26	gi 124870769 gb EAY62485.1	5-enolpyruvylshikimate (479)	557	125.1	8.3e-26
gi 139696462 gb ECG84095.1	hypothetical protein G (226)	563	126.2	1.8e-26	gi 139071862 gb ECD21725.1	hypothetical protein G (232)	552	124.0	9.1e-26
gi 135716657 gb EBJ40232.1	hypothetical protein G (326)	565	126.7	1.9e-26	gi 187716173 gb ACD17397.1	3-phosphoshikimate 1-c (434)	555	124.7	1e-25
gi 137948089 gb EBW91495.1	hypothetical protein G (201)	562	126.0	1.9e-26	gi 137566498 gb EBU79105.1	hypothetical protein G (225)	551	123.7	1e-25
gi 138908940 gb ECC37780.1	hypothetical protein G (241)	563	126.2	1.9e-26	gi 134551891 gb EBC01982.1	hypothetical protein G (329)	553	124.2	1.1e-25
gi 142922285 gb EDB53971.1	hypothetical protein G (362)	565	126.7	2.1e-26	gi 139245948 gb ECB35232.1	hypothetical protein G (215)	550	123.5	1.1e-25
gi 135240692 gb EBG36991.1	hypothetical protein G (283)	563	126.3	2.2e-26	gi 135226702 gb EBG28755.1	hypothetical protein G (310)	552	124.0	1.2e-25
gi 138795144 gb ECB89357.1	hypothetical protein G (240)	562	126.0	2.2e-26	gi 191688767 gb ABE31967.1	3-phosphoshikimate 1-ca (434)	554	124.3	1.2e-25
gi 135941869 gb EBK86062.1	hypothetical protein G (402)	565	126.8	2.3e-26	gi 14952781 gb EBE52135.1	hypothetical protein G (377)	553	124.3	1.2e-25
gi 134868092 gb EBD95850.1	hypothetical protein G (246)	562	126.0	2.3e-26	gi 135604263 gb EBI70715.1	hypothetical protein G (320)	552	124.0	1.2e-25
gi 138512645 gb ECC03135.1	hypothetical protein G (247)	562	126.0	2.3e-26	gi 135483426 gb EBH93800.1	hypothetical protein G (347)	552	124.0	1.3e-25
gi 141158183 gb ECC003135.1	hypothetical protein G (233)	561	125.8	2.5e-26	gi 139636870 gb ECG42399.1	hypothetical protein G (253)	550	123.6	1.3e-25
gi 135590928 gb EBI62468.1	hypothetical protein G (298)	562	126.1	2.7e-26	gi 138847143 gb ECC13990.1	hypothetical protein G (217)	549	123.3	1.3e-25
gi 72395592 gb AAZ69865.1	3-phosphoshikimate 1-ca (443)	564	126.6	2.8e-26	gi 105892312 gb ABF75477.1	3-phosphoshikimate 1-c (434)	553	124.3	1.4e-25
gi 141894282 gb ECF99316.1	hypothetical protein G (237)	560	125.6	2.9e-26	gi 136947697 gb EBR34653.1	hypothetical protein G (240)	549	123.3	1.4e-25
gi 137705280 gb EBV55748.1	hypothetical protein G (244)	560	125.6	3e-26	gi 134979326 gb EBE86999.1	hypothetical protein G (212)	548	123.1	1.5e-25
gi 139477785 gb ECF35725.1	hypothetical protein G (179)	558	125.2	3.1e-26	gi 1237875728 gb ACR28061.1	Prephenate dehydrogena (432)	552	124.1	1.6e-25
gi 167284551 gb ABZ37415.1	Sequence 11353 from pa (424)	563	126.4	3.1e-26	gi 142836321 gb EDA94821.1	hypothetical protein G (438)	552	124.1	1.6e-25
gi 143559119 gb EDF62999.1	hypothetical protein G (319)	561	125.9	3.3e-26	gi 143696142 gb EDG32910.1	hypothetical protein G (270)	549	123.4	1.6e-25
gi 141656055 gb ECS67288.1	hypothetical protein G (242)	559	125.4	3.5e-26	gi 137403532 gb EBY91789.1	hypothetical protein G (308)	549	123.4	1.8e-25
gi 138863194 gb ECC19987.1	hypothetical protein G (245)	559	125.4	3.5e-26	gi 140684627 gb ECM80425.1	hypothetical protein G (188)	546	122.7	1.8e-25
gi 136107740 gb EBL96408.1	hypothetical protein G (251)	559	125.4	3.6e-26	gi 140227603 gb ECK39251.1	hypothetical protein G (192)	546	122.7	1.8e-25
gi 134961533 gb EBE57972.1	hypothetical protein G (364)	561	125.9	3.7e-26	gi 137807735 gb EBW11120.1	hypothetical protein G (227)	547	122.9	1.8e-25
gi 141118072 gb ECF75106.1	hypothetical protein G (266)	559	125.4	3.7e-26	gi 139664048 gb ECG61622.1	hypothetical protein G (174)	545	122.4	2e-25
gi 143233038 gb EDD7786.1	hypothetical protein G (304)	559	125.5	4.2e-26	gi 135486766 gb EBH95950.1	hypothetical protein G (350)	549	123.4	2e-25
gi 143554952 gb EDF60809.1	hypothetical protein G (325)	559	125.5	4.5e-26	gi 138799594 gb ECB91450.1	hypothetical protein G (188)	545	122.5	2.1e-25
gi 140786812 gb ECN50244.1	hypothetical protein G (233)	557	125.0	4.5e-26	gi 116647157 gb ABK07798.1	3-phosphoshikimate 1-c (434)	550	123.7	2.1e-25
gi 142807522 gb EDA73087.1	hypothetical protein G (335)	559	125.5	4.6e-26	gi 141904797 gb ECU06828.1	hypothetical protein G (225)	546	122.7	2.1e-25
gi 139608209 gb ECG23917.1	hypothetical protein G (241)	557	125.0	4.6e-26	gi 137657577 gb EBV28937.1	hypothetical protein G (274)	547	123.0	2.2e-25
gi 136366647 gb ERN68381.1	hypothetical protein G (305)	558	125.3	4.9e-26	gi 142502870 gb ECY54666.1	hypothetical protein G (244)	546	122.7	2.2e-25
gi 136116511 gb EBM02403.1	hypothetical protein G (311)	558	125.3	5e-26	gi 135619300 gb EBI80064.1	hypothetical protein G (216)	545	122.5	2.4e-25
gi 136336798 gb ERN48052.1	hypothetical protein G (321)	558	125.3	5.1e-26	gi 135336253 gb EBG95349.1	hypothetical protein G (222)	545	122.5	2.4e-25
gi 139515305 gb ECF59981.1	hypothetical protein G (284)	557	125.0	5.3e-26	gi 144092979 gb EDH181512.1	hypothetical protein G (224)	545	122.5	2.4e-25
gi 136526549 gb EBQ73484.1	hypothetical protein G (337)	558	125.3	5.3e-26	gi 134905326 gb EBB20586.1	hypothetical protein G (322)	547	123.0	2.5e-25
gi 141806782 gb ECT38147.1	hypothetical protein G (247)	556	124.8	5.4e-26	gi 139718797 gb ECG99847.1	hypothetical protein G (282)	546	122.7	2.6e-25
gi 138537975 gb ECA28323.1	hypothetical protein G (183)	554	124.3	5.6e-26	gi 141939792 gb ECU31133.1	hypothetical protein G (241)	545	122.5	5.6e-25
gi 140158907 gb ECU91707.1	hypothetical protein G (264)	556	124.8	5.7e-26	gi 142174489 gb ECM14547.1	hypothetical protein G (215)	544	122.3	2.7e-25

gi 142106223 gb ECV63468.1	hypothetical protein G (260)	545	122.5	2.8e-25	gi 135239148 gb EBG36086.1	hypothetical protein G (260)	536	120.7	1e-24
gi 141370398 gb ECR35261.1	hypothetical protein G (229)	544	122.3	2.9e-25	gi 167281782 gb ABZ34646.1	Sequence 8584 from pat (435)	539	121.4	1e-24
gi 139693729 gb ECG82133.1	hypothetical protein G (231)	544	122.3	2.9e-25	gi 193353516 gb ABF07605.1	3-phosphoshikimate 1-ca (452)	539	121.4	1.1e-24
gi 135961619 gb EBK99364.1	hypothetical protein G (334)	546	122.8	3e-25	gi 140909158 gb ECG32037.1	hypothetical protein G (197)	534	120.2	1.1e-24
gi 137266543 gb EBT13073.1	hypothetical protein G (285)	545	122.5	3e-25	gi 136287602 gb EBN14795.1	hypothetical protein G (240)	535	120.2	1.1e-24
gi 141829576 gb ECY3906.1	hypothetical protein G (246)	544	122.3	3e-25	gi 1342046704 gb ECU14523.1	hypothetical protein G (289)	535	120.7	1.1e-24
gi 139685248 gb ECR76510.1	hypothetical protein G (210)	543	122.1	3.1e-25	gi 171992497 gb ACG363416.1	3-phosphoshikimate 1-c (434)	538	121.2	1.2e-24
gi 136941044 gb EBR30919.1	hypothetical protein G (316)	545	122.6	3.3e-25	gi 139681527 gb ECG73843.1	hypothetical protein G (233)	534	120.2	1.2e-24
gi 141897485 gb ECU01623.1	hypothetical protein G (270)	544	122.3	3.3e-25	gi 141468959 gb ECG500232.1	hypothetical protein G (280)	535	120.5	1.2e-24
gi 142659323 gb ECZ65576.1	hypothetical protein G (383)	546	122.8	3.3e-25	gi 139893048 gb ECG68255.1	hypothetical protein G (312)	535	120.5	1.4e-24
gi 141433718 gb ECR79657.1	hypothetical protein G (199)	542	121.8	3.4e-25	gi 1222452024 gb ACW56289.1	3-phosphoshikimate 1-c (453)	537	121.0	1.4e-24
gi 14186828 gb ECR80295.1	hypothetical protein G (172)	541	121.6	3.4e-25	gi 142861145 gb EDB09899.1	hypothetical protein G (338)	535	120.5	1.5e-24
gi 137239164 gb EBR598164.1	hypothetical protein G (242)	543	122.1	3.5e-25	gi 135288143 gb EBG64892.1	hypothetical protein G (207)	537	119.8	1.5e-24
gi 143916119 gb EDH55081.1	hypothetical protein G (216)	542	121.9	3.6e-25	gi 139853911 gb ECH92771.1	hypothetical protein G (292)	534	120.3	1.5e-24
gi 135865254 gb EBK33280.1	hypothetical protein G (313)	544	122.4	3.7e-25	gi 136661056 gb EBF57372.1	hypothetical protein G (184)	531	119.5	1.5e-24
gi 139589323 gb EBK54995.1	hypothetical protein G (225)	542	121.9	3.8e-25	gi 141709826 gb ECR86859.1	hypothetical protein G (234)	532	119.8	1.6e-24
gi 141665863 gb ECG70196.1	hypothetical protein G (226)	542	121.9	3.8e-25	gi 139040948 gb ECU00082.1	hypothetical protein G (237)	532	119.8	1.7e-24
gi 138530901 gb ECA23368.1	hypothetical protein G (287)	543	122.1	4e-25	gi 135317778 gb EBG682900.1	hypothetical protein G (410)	535	120.5	1.7e-24
gi 13589658 gb EBK54995.1	hypothetical protein G (345)	544	122.4	4.1e-25	gi 140630954 gb ECM4840.1	hypothetical protein G (298)	533	120.1	1.7e-24
gi 140405936 gb ECL55694.1	hypothetical protein G (232)	541	121.7	4.5e-25	gi 140343196 gb ECU11994.1	hypothetical protein G (304)	533	120.1	1.8e-24
gi 134450625 gb EBB42108.1	hypothetical protein G (201)	540	121.4	4.5e-25	gi 133393659 gb EBH33889.1	hypothetical protein G (261)	532	119.8	1.8e-24
gi 134533954 gb EBB91312.1	hypothetical protein G (242)	541	121.7	4.6e-25	gi 139064451 gb ECU16608.1	hypothetical protein G (223)	531	119.6	1.8e-24
gi 137214519 gb EBR584393.1	hypothetical protein G (295)	542	121.9	4.7e-25	gi 138276283 gb EBX74911.1	hypothetical protein G (308)	532	119.9	2.1e-24
gi 134849254 gb EBD83358.1	hypothetical protein G (275)	541	121.7	5.2e-25	gi 140028597 gb ECU10751.1	hypothetical protein G (312)	532	119.9	2.1e-24
gi 136206440 gb EBR59627.1	hypothetical protein G (245)	540	121.5	5.4e-25	gi 136443021 gb EBU19562.1	hypothetical protein G (457)	529	119.1	2.2e-24
gi 134981203 gb EBE71267.1	hypothetical protein G (292)	541	121.7	5.4e-25	gi 142905356 gb EDB41681.1	hypothetical protein G (199)	529	119.1	2.2e-24
gi 83655416 gb ABC39479.1	prephenate dehydrogenas (805)	547	123.2	5.5e-25	gi 136315894 gb EBN34015.1	hypothetical protein G (280)	531	119.6	2.2e-24
gi 138641254 gb ECN99072.1	hypothetical protein G (302)	541	121.7	5.6e-25	gi 143715743 gb EDC41937.1	hypothetical protein G (243)	530	119.4	2.3e-24
gi 140654805 gb ECM59434.1	hypothetical protein G (256)	540	121.5	5.6e-25	gi 141915818 gb ECU14327.1	hypothetical protein G (249)	530	119.4	2.3e-24
gi 139967027 gb ECT69743.1	hypothetical protein G (306)	541	121.7	5.7e-25	gi 138116427 gb EBR83452.1	hypothetical protein G (297)	531	119.6	2.3e-24
gi 137329713 gb EBT48905.1	hypothetical protein G (223)	539	121.2	5.7e-25	gi 134967391 gb EBE56191.1	hypothetical protein G (354)	532	119.9	2.3e-24
gi 141333425 gb ECR11074.1	hypothetical protein G (296)	540	121.5	6.3e-25	gi 141188377 gb ECQ24376.1	hypothetical protein G (306)	531	119.6	2.4e-24
gi 141882968 gb ECT91410.1	hypothetical protein G (185)	537	120.8	6.5e-25	gi 184191968 gb ACC69933.1	3-phosphoshikimate 1-c (434)	533	120.1	2.4e-24
gi 135645619 gb EBI96344.1	hypothetical protein G (306)	540	121.5	6.5e-25	gi 135670495 gb EBJ11737.1	hypothetical protein G (316)	531	119.7	2.5e-24
gi 140178654 gb ECK05494.1	hypothetical protein G (222)	538	121.0	6.6e-25	gi 137178927 gb EBR564474.1	hypothetical protein G (249)	529	119.2	2.7e-24
gi 77966375 gb ABB07755.1	3-phosphoshikimate 1-ca (434)	542	122.0	6.6e-25	gi 134138234 gb ABO53977.1	3-phosphoshikimate 1-c (434)	532	119.9	2.8e-24
gi 141671849 gb ECS73496.1	hypothetical protein G (314)	540	121.5	6.7e-25	gi 139824132 gb ECH71785.1	hypothetical protein G (238)	528	119.0	3e-24
gi 141048681 gb ECP27929.1	hypothetical protein G (290)	539	121.3	7.2e-25	gi 139196108 gb ECR07006.1	hypothetical protein G (207)	527	118.7	3e-24
gi 135841164 gb EBK18114.1	hypothetical protein G (312)	539	121.3	7.7e-25	gi 141545034 gb ECS26839.1	hypothetical protein G (254)	528	119.0	3.1e-24
gi 142998533 gb EDC07332.1	hypothetical protein G (227)	537	120.8	7.8e-25	gi 135871899 gb EBK37709.1	hypothetical protein G (255)	528	119.0	3.1e-24
gi 142109868 gb ECV66243.1	hypothetical protein G (524)	542	122.0	7.8e-25	gi 135564677 gb EBI45872.1	hypothetical protein G (306)	529	118.5	3.2e-24
gi 141927970 gb ECU22932.1	hypothetical protein G (327)	539	121.3	8e-25	gi 115280963 gb ABT86480.1	3-phosphoshikimate 1-c (434)	531	119.7	3.2e-24
gi 138499014 gb ECA02780.1	hypothetical protein G (237)	537	120.8	8.1e-25	gi 137171985 gb EBG60590.1	hypothetical protein G (272)	528	119.0	3.3e-24
gi 55274195 gb AAV48979.1	hypothetical carboxyvin (202)	536	120.6	8.1e-25	gi 135477171 gb EBH89817.1	hypothetical protein G (384)	530	119.5	3.4e-24
gi 139629194 gb ECG37093.1	hypothetical protein G (306)	538	121.1	8.7e-25	gi 140788599 gb ECN51475.1	hypothetical protein G (235)	527	118.8	3.4e-24
gi 189333856 dbj BRG42926.1	3-phosphoshikimate 1- (434)	540	121.6	8.8e-25	gi 143039536 gb EDC37155.1	hypothetical protein G (336)	529	119.2	3.5e-24
gi 160342858 gb ABX15944.1	3-phosphoshikimate 1-c (434)	540	121.6	8.8e-25	gi 141712157 gb ECS88316.1	hypothetical protein G (216)	526	118.5	3.6e-24
gi 222436771 gb EEE43450.1	hypothetical protein S (136)	533	119.9	8.9e-25	gi 139732419 gb ECH09173.1	hypothetical protein G (227)	526	118.5	3.8e-24
gi 135327266 gb EBG89302.1	hypothetical protein G (357)	538	121.1	9.9e-25	gi 134604121 gb EBC33250.1	hypothetical protein G (325)	528	119.0	3.9e-24
gi 137591925 gb EBU93376.1	hypothetical protein G (256)	536	120.6	1e-24	gi 140472221 gb ECI93917.1	hypothetical protein G (284)	527	118.8	4e-24
gi 142105249 gb ECV62774.1	hypothetical protein G (305)	537	120.9	1e-24	gi 138558264 gb ECA42657.1	hypothetical protein G (291)	527	118.8	4.1e-24

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gi 1401118856 gb ECJ66743.1	hypothetical protein G (210)	525 118.3 4.1e-24	gi 1254218017 gb EET07401.1	prephenate dehydrogena (753)	525 118.6 1.2e-23
gi 142394074 gb ECX74728.1	hypothetical protein G (296)	527 118.8 4.1e-24	gi 1242138323 gb EES24725.1	prephenate dehydrogena (753)	525 118.6 1.2e-23
gi 137547042 gb EBU068034.1	hypothetical protein G (312)	527 118.8 4.3e-24	gi 143839650 gb EDH00163.1	hypothetical protein G (302)	519 117.1 1.3e-23
gi 136980766 gb EBR53373.1	hypothetical protein G (285)	526 118.6 4.6e-24	gi 1401119424 gb ECJ67138.1	hypothetical protein G (277)	517 116.7 1.4e-23
gi 1381110485 gb EBX80097.1	hypothetical protein G (218)	524 118.1 4.9e-24	gi 135489518 gb EBH9714.1	hypothetical protein G (271)	518 116.9 1.4e-23
gi 139494432 gb ECF45603.1	hypothetical protein G (305)	526 118.6 4.9e-24	gi 1842114626 gb EDU08669.1	prephenate dehydrogena (749)	524 118.4 1.4e-23
gi 141385612 gb ECR46209.1	hypothetical protein G (187)	527 117.9 4.9e-24	gi 138996659 gb ECG72241.1	hypothetical protein G (201)	516 116.4 1.4e-23
gi 113525597 emb CAJ91942.1	3-Enolpyruvylshikimat (434)	528 119.1 5e-24	gi 136324373 gb EBN39656.1	hypothetical protein G (337)	519 117.2 1.5e-23
gi 139454002 gb ECF21045.1	hypothetical protein G (284)	525 118.4 5.3e-24	gi 139441542 gb ECF12258.1	hypothetical protein G (242)	517 116.7 1.5e-23
gi 143591543 gb EDF76509.1	hypothetical protein G (219)	523 117.9 5.7e-24	gi 135491229 gb EBH89820.1	hypothetical protein G (208)	516 116.5 1.5e-23
gi 136364219 gb EBN66733.1	hypothetical protein G (310)	525 118.4 5.7e-24	gi 167277472 gb ABX30336.1	Sequence 4274 from pat (415)	520 117.4 1.5e-23
gi 137657142 gb EBV28387.1	hypothetical protein G (276)	524 118.2 6e-24	gi 140215327 gb ECK31464.1	hypothetical protein G (216)	516 116.5 1.5e-23
gi 141543043 gb ECR525410.1	hypothetical protein G (294)	524 118.2 6.3e-24	gi 150011975 gb ABR54427.1	3-phosphoshikimate 1-c (429)	520 117.4 1.6e-23
gi 138799362 gb ECB91357.1	hypothetical protein G (298)	524 118.2 6.4e-24	gi 142702742 gb ECF96501.1	hypothetical protein G (231)	516 116.5 1.6e-23
gi 136969921 gb EBR47225.1	hypothetical protein G (306)	524 118.2 6.5e-24	gi 142823924 gb EDA85437.1	hypothetical protein G (332)	518 117.0 1.7e-23
gi 135489629 gb EBH97784.1	hypothetical protein G (363)	525 118.4 6.6e-24	gi 143159217 gb EDD24462.1	hypothetical protein G (283)	517 116.7 1.7e-23
gi 140748856 gb ECN25154.1	hypothetical protein G (312)	524 118.2 6.7e-24	gi 140985159 gb EC085137.1	hypothetical protein G (283)	517 116.7 1.7e-23
gi 137375246 gb EBT74514.1	hypothetical protein G (226)	522 117.7 6.7e-24	gi 141847270 gb ECF66591.1	hypothetical protein G (241)	516 116.5 1.7e-23
gi 142865504 gb EDB13092.1	hypothetical protein G (227)	522 117.7 6.7e-24	gi 135215196 gb EBG22013.1	hypothetical protein G (259)	516 116.5 1.8e-23
gi 138613133 gb ECA81107.1	hypothetical protein G (326)	524 118.2 6.9e-24	gi 136230377 gb EBM75834.1	hypothetical protein G (307)	517 116.7 1.8e-23
gi 142607018 gb EC228589.1	hypothetical protein G (202)	521 117.5 7e-24	gi 139643880 gb ECG47198.1	hypothetical protein G (301)	516 116.5 2e-23
gi 139995621 gb ECI89691.1	hypothetical protein G (284)	523 118.0 7.1e-24	gi 135686333 gb EBU21480.1	hypothetical protein G (304)	516 116.5 2.1e-23
gi 137691967 gb EBV48315.1	hypothetical protein G (286)	523 118.0 7.1e-24	gi 141110942 gb ECF70249.1	hypothetical protein G (196)	515 115.8 2.2e-23
gi 135845227 gb EBK20663.1	hypothetical protein G (303)	523 118.0 7.5e-24	gi 142656925 gb EC263763.1	hypothetical protein G (197)	513 115.8 2.2e-23
gi 142543985 gb ECY84528.1	hypothetical protein G (268)	522 117.7 7.8e-24	gi 169652329 gb EDS85069.1	prephenate dehydrogena (749)	521 117.7 2.2e-23
gi 135854902 gb EBK26763.1	hypothetical protein G (236)	521 117.5 8.1e-24	gi 134442483 gb EBB37469.1	hypothetical protein G (285)	515 116.3 2.3e-23
gi 138005019 gb EBX23095.1	hypothetical protein G (288)	522 117.8 8.3e-24	gi 139920801 gb ECI37947.1	hypothetical protein G (156)	511 115.4 2.4e-23
gi 138091258 gb EBX69473.1	hypothetical protein G (175)	519 117.0 8.3e-24	gi 138180415 gb EBX24121.1	hypothetical protein G (314)	515 116.3 2.4e-23
gi 137912933 gb EBW71741.1	hypothetical protein G (279)	521 117.5 9.3e-24	gi 139647519 gb ECQ49757.1	hypothetical protein G (225)	513 115.8 2.4e-23
gi 138660060 gb ECB12035.1	hypothetical protein G (284)	521 117.6 9.5e-24	gi 237503144 gb ACQ95462.1	prephenate dehydrogena (749)	520 117.5 2.5e-23
gi 134549068 gb ECB00317.1	hypothetical protein G (241)	520 117.3 9.5e-24	gi 137703414 gb EBV54784.1	hypothetical protein G (279)	514 116.1 2.6e-23
gi 138550260 gb ECA37196.1	hypothetical protein G (251)	520 117.3 9.8e-24	gi 139914190 gb ECI33276.1	hypothetical protein G (294)	514 116.1 2.7e-23
gi 138878119 gb ECC226539.1	hypothetical protein G (255)	520 117.3 9.9e-24	gi 143760794 gb EDG64991.1	hypothetical protein G (317)	514 116.1 2.8e-23
gi 142411096 gb EXH87359.1	hypothetical protein G (436)	523 118.1 1e-23	gi 134531717 gb EBB89974.1	hypothetical protein G (201)	511 115.4 3e-23
gi 137078318 gb EBS08436.1	hypothetical protein G (314)	521 117.6 1e-23	gi 138115352 gb EBX82843.1	hypothetical protein G (238)	512 115.6 3e-23
gi 141123386 gb ECP78845.1	hypothetical protein G (245)	519 117.1 1.1e-23	gi 138840632 gb ECI10892.1	hypothetical protein G (289)	513 115.9 3e-23
gi 152482121 gb AAU48805.1	prephenate dehydrogenas (673)	525 118.6 1.1e-23	gi 135795613 gb EBU89439.1	hypothetical protein G (209)	511 115.4 3.1e-23
gi 142771693 gb EDA46374.1	hypothetical protein G (179)	517 116.6 1.1e-23	gi 141139548 gb ECF90029.1	hypothetical protein G (249)	512 115.7 3.1e-23
gi 176581095 gb ABA50570.1	prephenate dehydrogenas (714)	525 118.6 1.2e-23	gi 136509201 gb EB062385.1	hypothetical protein G (297)	513 115.9 3.1e-23
gi 157805514 gb EDO082884.1	prephenate dehydrogena (740)	525 118.6 1.2e-23	gi 136178233 gb EBW40882.1	hypothetical protein G (213)	511 115.4 3.1e-23
gi 126219744 gb ABN833250.1	prephenate dehydrogena (749)	525 118.6 1.2e-23	gi 135713521 gb EBJ38289.1	hypothetical protein G (353)	514 116.1 3.1e-23
gi 121227083 gb ABM49601.1	prephenate dehydrogena (749)	525 118.6 1.2e-23	gi 135495643 gb EBI01665.1	hypothetical protein G (384)	514 116.2 3.4e-23
gi 148029278 gb EDK87183.1	prephenate dehydrogena (749)	525 118.6 1.2e-23	gi 141373745 gb ECR37668.1	hypothetical protein G (236)	511 115.4 3.4e-23
gi 142494618 gb EDK52519.1	prephenate dehydrogena (749)	525 118.6 1.2e-23	gi 138618036 gb ECA84358.1	hypothetical protein G (281)	512 115.7 3.4e-23
gi 126243949 gb ABO07042.1	prephenate dehydrogena (749)	525 118.6 1.2e-23	gi 139219178 gb EC228296.1	hypothetical protein G (290)	512 115.7 3.5e-23
gi 126226820 gb ABN90360.1	prephenate dehydrogena (749)	525 118.6 1.2e-23	gi 136214158 gb EBM64824.1	hypothetical protein G (183)	509 115.0 3.6e-23
gi 124294618 gb ABN833250.1	prephenate dehydrogena (749)	525 118.6 1.2e-23	gi 140388086 gb ECI43376.1	hypothetical protein G (304)	512 115.7 3.7e-23
gi 160697699 gb EDF87669.1	prephenate dehydrogena (749)	525 118.6 1.2e-23	gi 143397410 gb ED73971.1	hypothetical protein G (270)	511 115.5 3.8e-23
gi 147750783 gb EDK57852.1	prephenate dehydrogena (749)	525 118.6 1.2e-23	gi 142916528 gb ED849892.1	hypothetical protein G (218)	509 115.0 4.2e-23
gi 157987840 gb EDO95605.1	prephenate dehydrogena (753)	525 118.6 1.2e-23	gi 134548409 gb EBB99923.1	hypothetical protein G (317)	511 115.5 4.4e-23
gi 152210541 emb CAH36524.1	putative bifunctional (753)	525 118.6 1.2e-23	gi 139132650 gb ECD62535.1	hypothetical protein G (231)	509 115.0 4.5e-23

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gi 142699289 gb EC294025.1	hypothetical protein G (199)	508	114.8	4.5e-23	gi 137829749 gb EBW24000.1	hypothetical protein G (258)	501	113.4	1.6e-22
gi 135742000 gb EBJ55937.1	hypothetical protein G (336)	511	115.5	4.6e-23	gi 176558044 emb CA19630.1	3-phosphoshikimate 1-c (438)	504	114.1	1.6e-22
gi 13478582 gb EBD4017.1	hypothetical protein G (150)	506	114.3	4.7e-23	gi 138810206 gb EC996158.1	hypothetical protein G (201)	499	112.9	1.7e-22
gi 179351349 gb ACB85619.1	3-phosphoshikimate 1-c (484)	513	116.0	4.7e-23	gi 141404015 gb ECR59067.1	hypothetical protein G (286)	501	113.4	1.7e-22
gi 137536874 gb EBU62471.1	hypothetical protein G (271)	509	115.0	5.1e-23	gi 135562509 gb EBT44489.1	hypothetical protein G (348)	502	113.6	1.7e-22
gi 142277937 gb ECW92013.1	hypothetical protein G (234)	508	114.8	5.2e-23	gi 142592013 gb ECG74370.1	hypothetical protein G (213)	499	112.9	1.8e-22
gi 141879126 gb ECT88675.1	hypothetical protein G (237)	508	114.8	5.3e-23	gi 141673429 gb ECR57470.1	hypothetical protein G (303)	501	113.4	1.8e-22
gi 142775989 gb EDA49581.1	hypothetical protein G (335)	510	115.3	5.3e-23	gi 135589703 gb EBT61715.1	hypothetical protein G (305)	501	113.4	1.8e-22
gi 141219643 gb ECQ44682.1	hypothetical protein G (291)	509	115.1	5.4e-23	gi 187724763 gb ACD25928.1	3-phosphoshikimate 1-c (434)	503	113.9	1.8e-22
gi 134400710 gb EBB13457.1	hypothetical protein G (303)	509	115.1	5.6e-23	gi 135570872 gb EBT49844.1	hypothetical protein G (275)	500	113.2	1.9e-22
gi 136273877 gb EBN05547.1	hypothetical protein G (220)	507	114.6	5.7e-23	gi 140714513 gb ECN01171.1	hypothetical protein G (281)	500	113.2	1.9e-22
gi 19322745 emb CAQ68748.1	3-enolpyruvylshikimat (434)	511	115.6	5.8e-23	gi 139789418 gb ECH47697.1	hypothetical protein G (204)	498	112.7	2e-22
gi 137333376 gb EBT50948.1	hypothetical protein G (265)	508	114.8	5.8e-23	gi 140794555 gb ECN55677.1	hypothetical protein G (215)	498	112.7	2e-22
gi 136805390 gb EBQ52454.1	hypothetical protein G (225)	507	114.6	5.8e-23	gi 136659405 gb EBR56376.1	hypothetical protein G (310)	500	113.2	2.1e-22
gi 138147023 gb EBY00725.1	hypothetical protein G (239)	507	114.6	6.1e-23	gi 143324668 gb EDR33761.1	hypothetical protein G (198)	497	112.5	2.2e-22
gi 138838260 gb ECC09710.1	hypothetical protein G (205)	506	114.4	6.2e-23	gi 135216633 gb EBG22867.1	hypothetical protein G (147)	499	112.0	2.3e-22
gi 138822185 gb ECC01789.1	hypothetical protein G (244)	507	114.6	6.2e-23	gi 135334320 gb EBG94059.1	hypothetical protein G (290)	499	113.0	2.3e-22
gi 140173956 gb ECK02082.1	hypothetical protein G (291)	508	114.9	6.3e-23	gi 138094881 gb EBX71452.1	hypothetical protein G (293)	499	113.0	2.3e-22
gi 141978626 gb ECU58234.1	hypothetical protein G (184)	505	114.1	6.5e-23	gi 137319505 gb EBT43281.1	hypothetical protein G (279)	498	112.8	2.6e-22
gi 72119670 gb AAZ61933.1	3-phosphoshikimate 1-ca (434)	510	115.3	6.6e-23	gi 137697594 gb EBV51548.1	hypothetical protein G (239)	497	112.5	2.6e-22
gi 139531150 gb ECF70348.1	hypothetical protein G (241)	506	114.4	7.1e-23	gi 135961265 gb EBR42313.1	hypothetical protein G (240)	497	112.5	2.6e-22
gi 135888366 gb EBK49261.1	hypothetical protein G (208)	505	114.2	7.2e-23	gi 138945048 gb ECC53187.1	hypothetical protein G (249)	497	112.5	2.7e-22
gi 124895538 gb EAY69418.1	5-enolpyruvylshikimate (434)	509	115.1	7.7e-23	gi 134404891 gb EBB15769.1	hypothetical protein G (296)	498	112.8	2.7e-22
gi 137246014 gb EBT02032.1	hypothetical protein G (288)	506	114.4	7.8e-23	gi 240864488 gb ACS62149.1	3-phosphoshikimate 1-c (434)	500	113.3	2.8e-22
gi 141653377 gb ECS66510.1	hypothetical protein G (279)	506	114.4	8.1e-23	gi 1254589820 gb ACT67182.1	putative 3-phosphoshik (440)	500	113.3	2.8e-22
gi 137929679 gb EBM81155.1	hypothetical protein G (200)	504	113.9	8.1e-23	gi 138445398 gb EBX72305.1	hypothetical protein G (174)	494	111.8	3e-22
gi 139453942 gb ECF21003.1	hypothetical protein G (205)	504	114.0	8.3e-23	gi 135382545 gb EBH26399.1	hypothetical protein G (290)	497	112.6	3.1e-22
gi 143057941 gb EDC50622.1	hypothetical protein G (296)	506	114.4	8.5e-23	gi 139190333 gb ECU28883.1	hypothetical protein G (300)	497	112.6	3.1e-22
gi 139195857 gb ECE06823.1	hypothetical protein G (298)	506	114.4	8.6e-23	gi 144206042 gb EDJ63793.1	hypothetical protein G (218)	495	112.1	3.2e-22
gi 141592162 gb ECS4928.1	hypothetical protein G (315)	506	114.5	9e-23	gi 142325118 gb ECX26898.1	hypothetical protein G (207)	494	111.9	3.5e-22
gi 140673199 gb ECM72415.1	hypothetical protein G (227)	504	114.0	9e-23	gi 138737512 gb ECB66482.1	hypothetical protein G (292)	496	112.4	3.5e-22
gi 14099785 gb ECO95579.1	hypothetical protein G (168)	502	113.5	9.3e-23	gi 134674198 gb EBG74845.1	hypothetical protein G (218)	494	111.9	3.7e-22
gi 137849920 gb EBW35596.1	hypothetical protein G (238)	504	114.0	9.4e-23	gi 135066400 gb EBR27712.1	hypothetical protein G (187)	493	111.7	3.7e-22
gi 142560062 gb ECY95832.1	hypothetical protein G (296)	505	114.2	9.8e-23	gi 141233824 gb ECQ56308.1	hypothetical protein G (189)	493	111.7	3.8e-22
gi 142690999 gb ECR288084.1	hypothetical protein G (220)	503	113.8	1e-22	gi 134587656 gb EBC23605.1	hypothetical protein G (190)	493	111.7	3.8e-22
gi 141723183 gb ECS95130.1	hypothetical protein G (197)	502	113.5	1.1e-22	gi 140456535 gb ECU88213.1	hypothetical protein G (161)	492	111.4	3.8e-22
gi 141903494 gb ECU05918.1	hypothetical protein G (235)	503	113.8	1.1e-22	gi 139895987 gb ECI20390.1	hypothetical protein G (236)	494	111.9	3.9e-22
gi 141081658 gb ECP49602.1	hypothetical protein G (200)	502	113.5	1.1e-22	gi 141391411 gb ECR50083.1	hypothetical protein G (236)	494	111.9	3.9e-22
gi 140248541 gb ECK53972.1	hypothetical protein G (295)	504	114.0	1.1e-22	gi 56387797 gb AAV86384.1	3-phosphoshikimate 1-ca (462)	498	112.9	4e-22
gi 197053762 gb ACH25460.1	Sequence 12 from paten (430)	506	114.5	1.2e-22	gi 137942810 gb EBW88522.1	hypothetical protein G (173)	492	111.4	4e-22
gi 19918689 gb AAW07883.1	3-phosphoshikimate 1-ca (430)	506	114.5	1.2e-22	gi 137048868 gb EBR91792.1	hypothetical protein G (182)	492	111.4	4.2e-22
gi 139595936 gb ECF90294.1	hypothetical protein G (223)	502	113.6	1.2e-22	gi 138566080 gb ECA48176.1	hypothetical protein G (303)	495	112.2	4.2e-22
gi 136628519 gb EBP38073.1	hypothetical protein G (229)	502	113.6	1.2e-22	gi 1386876301 gb EBQ99430.1	hypothetical protein G (127)	493	111.7	4.4e-22
gi 134737900 gb EBD11884.1	hypothetical protein G (239)	502	113.6	1.3e-22	gi 140108073 gb ECU59094.1	hypothetical protein G (122)	489	110.7	4.6e-22
gi 137863209 gb EBW43227.1	hypothetical protein G (283)	503	113.8	1.3e-22	gi 143115784 gb EDC92899.1	hypothetical protein G (338)	495	112.2	4.7e-22
gi 134518053 gb EBB81858.1	hypothetical protein G (176)	500	113.1	1.3e-22	gi 141104379 gb ECF65577.1	hypothetical protein G (297)	494	111.9	4.8e-22
gi 135427488 gb EBH56660.1	hypothetical protein G (307)	503	113.8	1.4e-22	gi 137527307 gb EBU57304.1	hypothetical protein G (155)	490	111.0	4.9e-22
gi 134602901 gb EBC32497.1	hypothetical protein G (311)	503	113.8	1.4e-22	gi 141656057 gb ECB67298.1	hypothetical protein G (224)	492	111.5	5e-22
gi 137036578 gb EBR84858.1	hypothetical protein G (237)	501	113.4	1.4e-22	gi 138008762 gb EBX25078.1	hypothetical protein G (191)	493	111.2	5.1e-22
gi 142717897 gb EDA07347.1	hypothetical protein G (282)	502	113.6	1.5e-22	gi 141452906 gb ECR92796.1	hypothetical protein G (271)	491	111.7	5.1e-22
gi 137009311 gb EBR69583.1	hypothetical protein G (300)	502	113.6	1.5e-22	gi 141160798 gb ECQ05001.1	hypothetical protein G (203)	491	111.3	5.3e-22

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gi 140375918 gb ECL34759.1	hypothetical protein G (290)	493	111.7	5.4e-22	gi 141366067 gb ECR28514.1	hypothetical protein G (313)	483	109.7	2.5e-21
gi 140676988 gb ECM75154.1	hypothetical protein G (137)	488	110.5	5.8e-22	gi 139699914 gb ECG86528.1	hypothetical protein G (265)	482	109.4	2.5e-21
gi 137324469 gb EBT46018.1	hypothetical protein G (274)	492	111.5	6e-22	gi 135162903 gb EBF89585.1	hypothetical protein G (163)	479	108.7	2.5e-21
gi 141899038 gb ECU02730.1	hypothetical protein G (285)	492	111.5	6.2e-22	gi 137214394 gb EB384325.1	hypothetical protein G (291)	482	109.5	2.7e-21
gi 143255766 gb EDD93469.1	hypothetical protein G (298)	492	111.5	6.4e-22	gi 134835060 gb EBD74225.1	hypothetical protein G (295)	482	109.5	2.7e-21
gi 139669584 gb ECG65360.1	hypothetical protein G (234)	490	111.1	6.6e-22	gi 138860202 gb ECU18701.1	hypothetical protein G (259)	481	109.2	2.8e-21
gi 134469618 gb EBB39935.1	hypothetical protein G (242)	490	111.1	7e-22	gi 142969511 gb EDS82736.1	hypothetical protein G (266)	481	109.2	2.8e-21
gi 140887583 gb ECO18446.1	hypothetical protein G (242)	490	111.1	7.2e-22	gi 134635372 gb EB525105.1	hypothetical protein G (205)	479	108.8	3e-21
gi 137834745 gb EBW26918.1	hypothetical protein G (289)	491	111.3	7.2e-22	gi 137576321 gb EBU84711.1	hypothetical protein G (292)	481	109.2	3.1e-21
gi 137324978 gb EBT45218.1	hypothetical protein G (293)	491	111.3	7.3e-22	gi 141072413 gb ECF43912.1	hypothetical protein G (300)	481	109.2	3.2e-21
gi 134804208 gb EBD54578.1	hypothetical protein G (211)	489	110.8	7.3e-22	gi 140438418 gb ECU75365.1	hypothetical protein G (182)	478	108.5	3.2e-21
gi 136393960 gb EBN87219.1	hypothetical protein G (312)	491	111.3	7.7e-22	gi 140053257 gb ECU25908.1	hypothetical protein G (225)	479	108.8	3.3e-21
gi 168346293 gb AA93899.1	prephenate dehydrogenas (447)	493	111.8	7.9e-22	gi 137599699 gb EBJ92019.1	hypothetical protein G (271)	480	109.0	3.3e-21
gi 139998431 gb ECI91715.1	hypothetical protein G (271)	490	111.1	7.9e-22	gi 137030492 gb EBR81435.1	hypothetical protein G (171)	477	108.3	3.5e-21
gi 141955051 gb ECU42041.1	hypothetical protein G (165)	487	110.4	7.9e-22	gi 138586257 gb ECA62165.1	hypothetical protein G (288)	480	109.0	3.5e-21
gi 136262507 gb EBM97543.1	hypothetical protein G (237)	489	110.9	8.1e-22	gi 141713106 gb EC88901.1	hypothetical protein G (346)	481	109.3	3.6e-21
gi 139052693 gb ECD08205.1	hypothetical protein G (298)	490	111.1	8.6e-22	gi 143098825 gb EDC80571.1	hypothetical protein G (309)	480	109.0	3.7e-21
gi 143287006 gb EBE12905.1	hypothetical protein G (145)	485	109.9	9.5e-22	gi 142213889 gb ECW48454.1	hypothetical protein G (223)	478	108.6	3.8e-21
gi 138419111 gb EB253968.1	hypothetical protein G (247)	488	110.7	9.7e-22	gi 138251176 gb EBY57356.1	hypothetical protein G (233)	478	108.6	3.9e-21
gi 140838036 gb ECN85960.1	hypothetical protein G (292)	489	110.9	9.7e-22	gi 137014132 gb EBR72273.1	hypothetical protein G (244)	478	108.6	4.1e-21
gi 141898445 gb ECU02305.1	hypothetical protein G (256)	488	110.7	1e-21	gi 140523504 gb ECM09797.1	hypothetical protein G (245)	478	108.6	4.1e-21
gi 136737899 gb EBF43656.1	hypothetical protein G (273)	488	110.7	1.1e-21	gi 137719292 gb EBV63298.1	hypothetical protein G (180)	476	108.1	4.2e-21
gi 134902958 gb EBE19018.1	hypothetical protein G (336)	489	110.9	1.1e-21	gi 138030261 gb EBX36003.1	hypothetical protein G (263)	478	108.6	4.3e-21
gi 137123035 gb EBS36550.1	hypothetical protein G (214)	486	110.2	1.1e-21	gi 171193469 gb AC844430.1	3-phosphoshikimate 1-c (442)	481	109.3	4.4e-21
gi 143069597 gb EBT59159.1	hypothetical protein G (303)	488	110.7	1.2e-21	gi 142962907 gb EC82861.1	hypothetical protein G (150)	474	107.7	4.7e-21
gi 135579519 gb EBT55375.1	hypothetical protein G (329)	488	110.7	1.2e-21	gi 168992012 gb ACA39552.1	3-phosphoshikimate 1-c (187)	475	107.9	5e-21
gi 136994338 gb EBR61028.1	hypothetical protein G (280)	487	110.5	1.3e-21	gi 135982409 gb EBU13409.1	hypothetical protein G (309)	478	108.6	5e-21
gi 257046992 gb ACV36180.1	3-phosphoshikimate 1-c (635)	492	111.7	1.3e-21	gi 141790910 gb ECF30914.1	hypothetical protein G (168)	474	107.7	5.2e-21
gi 141927329 gb ECU22470.1	hypothetical protein G (289)	487	110.5	1.3e-21	gi 139532469 gb ECF71502.1	hypothetical protein G (279)	477	108.4	5.3e-21
gi 139717854 gb ECG99181.1	hypothetical protein G (231)	485	110.0	1.4e-21	gi 141940271 gb ECU31475.1	hypothetical protein G (213)	475	107.9	5.6e-21
gi 139910655 gb ECK81100.1	hypothetical protein G (235)	485	110.0	1.4e-21	gi 137963940 gb EBX00422.1	hypothetical protein G (305)	477	108.4	5.7e-21
gi 140066777 gb ECU32528.1	hypothetical protein G (282)	486	110.3	1.5e-21	gi 1394039852 gb EC91909.1	hypothetical protein G (260)	476	108.2	5.7e-21
gi 140973901 gb ECO77339.1	hypothetical protein G (290)	486	110.3	1.5e-21	gi 142711155 gb EDA02482.1	hypothetical protein G (226)	475	107.9	5.9e-21
gi 140297850 gb ECK81100.1	hypothetical protein G (260)	485	110.1	1.6e-21	gi 1226458362 gb EEH55659.1	predicted protein [Mic (459)	479	108.9	6.1e-21
gi 137717949 gb EBV62551.1	hypothetical protein G (230)	484	109.8	1.6e-21	gi 138319895 gb EBY95130.1	hypothetical protein G (282)	476	108.2	6.1e-21
gi 138602658 gb ECA73649.1	hypothetical protein G (273)	485	110.1	1.6e-21	gi 134623694 gb EB448725.1	hypothetical protein G (288)	476	108.2	6.3e-21
gi 139026437 gb ECC89644.1	hypothetical protein G (293)	485	110.1	1.7e-21	gi 140656566 gb ECM06669.1	hypothetical protein G (250)	475	108.0	6.4e-21
gi 137195758 gb EBS73722.1	hypothetical protein G (210)	483	109.6	1.7e-21	gi 142100413 gb ECV59278.1	hypothetical protein G (308)	476	108.2	6.6e-21
gi 140786534 gb ECN50058.1	hypothetical protein G (295)	485	110.1	1.7e-21	gi 141687467 gb EC881421.1	hypothetical protein G (262)	475	108.0	6.7e-21
gi 135680007 gb EBU17574.1	hypothetical protein G (311)	485	110.1	1.8e-21	gi 174279191 emb CAD14609.1	probable 3-phosphoshik (436)	478	108.7	6.7e-21
gi 141989319 gb ECU65887.1	hypothetical protein G (264)	484	109.8	1.8e-21	gi 138135881 gb EBX94279.1	hypothetical protein G (268)	475	108.0	6.8e-21
gi 137804261 gb EBW09125.1	hypothetical protein G (273)	484	109.9	1.9e-21	gi 134908887 gb EBE22927.1	hypothetical protein G (308)	475	108.0	7.7e-21
gi 136078872 gb EBU76774.1	hypothetical protein G (199)	482	109.4	1.9e-21	gi 137259371 gb EBT09655.1	hypothetical protein G (221)	473	107.5	7.7e-21
gi 161165740 emb CAN97045.1	3-phosphoshikimate 1- (461)	487	110.6	1.9e-21	gi 141106614 gb ECR61715.1	hypothetical protein G (270)	474	107.8	7.9e-21
gi 138607890 gb ECA77386.1	hypothetical protein G (181)	481	109.1	2e-21	gi 137243061 gb EBT00335.1	hypothetical protein G (245)	473	107.5	8.4e-21
gi 1399918049 gb ECT36047.1	hypothetical protein G (260)	483	109.6	2.1e-21	gi 141407006 gb ECR61199.1	hypothetical protein G (262)	473	107.6	8.9e-21
gi 142266198 gb ECW83397.1	hypothetical protein G (325)	484	109.9	2.2e-21	gi 183763801 emb CAD21207.1	probable PENTAFUNCTION (1563)	483	110.0	9.8e-21
gi 140442914 gb ECU78527.1	hypothetical protein G (242)	482	109.4	2.3e-21	gi 139371007 gb ECB56561.1	hypothetical protein G (304)	473	107.6	1e-20
gi 138159519 gb EBY09502.1	hypothetical protein G (205)	481	109.2	2.3e-21	gi 142507077 gb ECY57668.1	hypothetical protein G (305)	473	107.6	1e-20
gi 136332752 gb EBN45289.1	hypothetical protein G (209)	481	109.2	2.3e-21	gi 157321714 gb ABV40811.1	3-phosphoshikimate 1-c (428)	475	108.1	1e-20
gi 139820926 gb ECH69481.1	hypothetical protein G (223)	481	109.2	2.4e-21	gi 136433133 gb EBO11861.1	hypothetical protein G (262)	472	107.4	1e-20

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gi 137000978 gb EBR64813.1	hypothetical protein G (230)	471	107.1	1.1e-20	gi 144582815 gb ABP00889.1	predicted protein [Ost	(436)	467	106.4	3.3e-20
gi 137293075 gb EBT28512.1	hypothetical protein G (272)	472	107.4	1.1e-20	gi 141964658 gb ECU48472.1	hypothetical protein G (268)	464	105.7	3.3e-20	
gi 139621692 gb ECG31968.1	hypothetical protein G (272)	472	107.4	1.1e-20	gi 135455852 gb EBH75607.1	hypothetical protein G (235)	463	105.5	3.4e-20	
gi 139023907 gb ECC87913.1	hypothetical protein G (166)	469	106.6	1.1e-20	gi 139579623 gb ECG03907.1	hypothetical protein G (281)	464	105.7	3.4e-20	
gi 134084660 gb EBE06854.1	hypothetical protein G (276)	472	107.4	1.1e-20	gi 141317497 gb ECR00630.1	hypothetical protein G (283)	464	105.7	3.5e-20	
gi 134079552 gb ECN56376.1	hypothetical protein G (280)	472	107.4	1.1e-20	gi 140510912 gb ECM06926.1	hypothetical protein G (208)	462	105.2	3.5e-20	
gi 141302923 gb ECQ94687.1	hypothetical protein G (281)	472	107.4	1.1e-20	gi 141939310 gb ECU30795.1	hypothetical protein G (251)	463	105.5	3.6e-20	
gi 138657864 gb ECB10524.1	hypothetical protein G (283)	472	107.4	1.1e-20	gi 136694505 gb EBE79130.1	hypothetical protein G (183)	461	105.0	3.7e-20	
gi 136993434 gb ECB60509.1	hypothetical protein G (284)	472	107.4	1.1e-20	gi 1146414 gb AAA85091.1	3-phosphoshikimate 1-car	(432)	466	106.2	3.7e-20
gi 143672084 gb EDG18795.1	hypothetical protein G (419)	474	107.9	1.2e-20	gi 141809387 gb ECT39920.1	hypothetical protein G (270)	463	105.5	3.8e-20	
gi 139122965 gb ECD57240.1	hypothetical protein G (306)	472	107.4	1.2e-20	gi 134629207 gb EBC48440.1	hypothetical protein G (272)	463	105.5	3.9e-20	
gi 134407858 gb EBB17421.1	hypothetical protein G (314)	472	107.4	1.2e-20	gi 134464347 gb EBB550178.1	hypothetical protein G (197)	461	105.0	3.9e-20	
gi 143053685 gb EDC47513.1	hypothetical protein G (266)	471	107.1	1.2e-20	gi 88176432 gb EAQ83900.1	hypothetical protein CH	(1464)	473	107.9	3.9e-20
gi 136268536 gb EDN01805.1	hypothetical protein G (315)	472	107.4	1.2e-20	gi 142577198 gb EC07785.1	hypothetical protein G (482)	466	106.2	4.1e-20	
gi 140469715 gb ECL93060.1	hypothetical protein G (231)	470	106.9	1.2e-20	gi 134557217 gb EBC05219.1	hypothetical protein G (296)	463	105.5	4.2e-20	
gi 138080088 gb EBX63139.1	hypothetical protein G (281)	471	107.2	1.3e-20	gi 136996308 gb EBR62166.1	hypothetical protein G (181)	460	104.8	4.2e-20	
gi 134464839 gb EBB50457.1	hypothetical protein G (177)	468	106.4	1.3e-20	gi 140328230 gb ECU01542.1	hypothetical protein G (182)	460	104.8	4.2e-20	
gi 139905975 gb ECI27361.1	hypothetical protein G (248)	470	106.9	1.3e-20	gi 1880229313 emb CAQ097190.1	3-phosphoshikimate 1-	(428)	465	106.0	4.3e-20
gi 138620417 gb ECA85940.1	hypothetical protein G (312)	471	107.2	1.4e-20	gi 135851336 gb EBK24502.1	hypothetical protein G (161)	459	104.6	4.4e-20	
gi 139654368 gb ECG54707.1	hypothetical protein G (147)	466	106.0	1.5e-20	gi 140033122 gb ECJ13099.1	hypothetical protein G (194)	460	104.8	4.5e-20	
gi 134728264 gb EBD06387.1	hypothetical protein G (253)	469	106.7	1.5e-20	gi 137176800 gb EBE63254.1	hypothetical protein G (271)	462	105.3	4.5e-20	
gi 137182909 gb EBE66675.1	hypothetical protein G (260)	469	106.7	1.6e-20	gi 141186881 gb ECQ23250.1	hypothetical protein G (206)	460	104.8	4.7e-20	
gi 148551350 gb ABQ86478.1	EPSP synthase (3-phosp	(438)	472	107.5	1.6e-20	gi 135208489 gb EBG18076.1	hypothetical protein G (206)	460	104.8	4.7e-20
gi 137424329 gb EBU02368.1	hypothetical protein G (278)	469	106.7	1.7e-20	gi 138340796 gb EBZ07169.1	hypothetical protein G (125)	457	104.1	4.7e-20	
gi 140787766 gb ECN50901.1	hypothetical protein G (287)	469	106.7	1.7e-20	gi 139748675 gb ECH19163.1	hypothetical protein G (288)	462	105.3	4.7e-20	
gi 206590606 emb CAQ37568.1	3-phosphoshikimate 1-	(435)	471	107.2	1.8e-20	gi 137091767 gb EBJ15725.1	hypothetical protein G (214)	460	104.8	4.9e-20
gi 140676899 gb ECM75091.1	hypothetical protein G (168)	465	105.8	1.9e-20	gi 135343553 gb EBH00233.1	hypothetical protein G (300)	462	105.3	4.9e-20	
gi 136917542 gb EBR18692.1	hypothetical protein G (289)	468	106.5	2e-20	gi 140995635 gb ECQ92669.1	hypothetical protein G (157)	458	104.3	5e-20	
gi 134775968 gb EBD35292.1	hypothetical protein G (297)	468	106.5	2e-20	gi 139568311 gb ECF96248.1	hypothetical protein G (264)	461	105.1	5e-20	
gi 139227125 gb ECE28521.1	hypothetical protein G (268)	467	106.3	2.1e-20	gi 137278631 gb EBT20527.1	hypothetical protein G (136)	457	104.1	5.1e-20	
gi 138030771 gb EBX36292.1	hypothetical protein G (275)	467	106.3	2.2e-20	gi 134745606 gb EBD16293.1	hypothetical protein G (197)	459	104.6	5.2e-20	
gi 138150939 gb EBY03425.1	hypothetical protein G (202)	465	105.8	2.2e-20	gi 141460123 gb ECR97455.1	hypothetical protein G (278)	461	105.1	5.3e-20	
gi 136724096 gb EBE98532.1	hypothetical protein G (180)	464	105.6	2.3e-20	gi 135951103 gb EBR92257.1	hypothetical protein G (282)	461	105.1	5.3e-20	
gi 138014097 gb EBX27907.1	hypothetical protein G (256)	466	106.1	2.4e-20	gi 140503041 gb ECM04119.1	hypothetical protein G (288)	461	105.1	5.4e-20	
gi 139974702 gb ECI75189.1	hypothetical protein G (157)	463	105.4	2.4e-20	gi 141018576 gb ECF08567.1	hypothetical protein G (248)	460	104.8	5.5e-20	
gi 142058446 gb ECV24053.1	hypothetical protein G (439)	469	106.8	2.5e-20	gi 139397227 gb ECB83225.1	hypothetical protein G (305)	461	105.1	5.7e-20	
gi 139682895 gb ECG74820.1	hypothetical protein G (274)	466	106.1	2.5e-20	gi 91712081 gb ABE52008.1	3-phosphoshikimate 1-ca	(427)	463	105.6	5.7e-20
gi 137260499 gb EBT10295.1	hypothetical protein G (274)	466	106.1	2.5e-20	gi 142982566 gb EDB96566.1	hypothetical protein G (310)	461	105.1	5.8e-20	
gi 136231923 gb EBM76866.1	hypothetical protein G (197)	464	105.6	2.5e-20	gi 140111307 gb ECJ61391.1	hypothetical protein G (265)	460	104.9	5.8e-20	
gi 136408371 gb ERN97136.1	hypothetical protein G (286)	466	106.1	2.6e-20	gi 134663080 gb EBC68366.1	hypothetical protein G (140)	456	103.9	6e-20	
gi 141056695 gb ECP33646.1	hypothetical protein G (179)	463	105.4	2.7e-20	gi 138161925 gb EBY1146.1	hypothetical protein G (202)	458	104.4	6.2e-20	
gi 138140452 gb EBX96828.1	hypothetical protein G (302)	466	106.1	2.8e-20	gi 137916341 gb EBW73633.1	hypothetical protein G (284)	460	104.9	6.2e-20	
gi 140421950 gb ECL64775.1	hypothetical protein G (256)	465	105.9	2.8e-20	gi 135811093 gb EBJ99203.1	hypothetical protein G (247)	459	104.6	6.3e-20	
gi 88600955 gb ABD46423.1	putative 3-phosphoshiki	(435)	468	106.6	2.8e-20	gi 139806318 gb ECH59432.1	hypothetical protein G (292)	460	104.9	6.3e-20
gi 136146607 gb EBM20258.1	hypothetical protein G (190)	463	105.4	2.8e-20	gi 143480854 gb EDF21802.1	hypothetical protein G (250)	459	104.6	6.4e-20	
gi 142249738 gb ECM71259.1	hypothetical protein G (439)	468	106.6	2.8e-20	gi 135348262 gb EBH02057.1	hypothetical protein G (304)	460	104.9	6.6e-20	
gi 136631260 gb EBE39693.1	hypothetical protein G (209)	463	105.4	3.1e-20	gi 142930364 gb EDB59786.1	hypothetical protein G (262)	459	104.7	6.7e-20	
gi 141822654 gb ECT49103.1	hypothetical protein G (293)	465	105.9	3.1e-20	gi 139455460 gb ECR22083.1	hypothetical protein G (268)	459	104.7	6.8e-20	
gi 1256729198 gb EEU42552.1	predicted protein [Nec	(1569)	475	108.3	3.1e-20	gi 1412275612 gb ECZ06674.1	hypothetical protein G (196)	457	104.2	6.9e-20
gi 135910595 gb EBR64732.1	hypothetical protein G (305)	465	105.9	3.2e-20	gi 141222898 gb ECQ46942.1	hypothetical protein G (237)	458	104.4	7.1e-20	
gi 1206595339 emb CAQ62266.1	3-phosphoshikimate 1-	(435)	467	106.4	3.3e-20	gi 139075902 gb ECD24383.1	hypothetical protein G (281)	459	104.7	7.1e-20

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gi 139188816 gb ECE011784.1	hypothetical protein G (248)	458 104.4 7.3e-20	gi 139852959 gb EB085720.1	hypothetical protein G (307)	451 103.0 2.4e-19
gi 135804817 gb EBJ95270.1	hypothetical protein G (248)	458 104.4 7.3e-20	gi 140227605 gb ECR39253.1	hypothetical protein G (307)	451 103.0 2.4e-19
gi 138660385 gb ECB12258.1	hypothetical protein G (221)	457 104.2 7.7e-20	gi 134872021 gb EB098471.1	hypothetical protein G (270)	450 102.8 2.5e-19
gi 168827279 gb ACA32650.1	3-phosphoshikimate 1-c (432)	461 105.2 7.7e-20	gi 140036373 gb ECJ16119.1	hypothetical protein G (279)	450 102.8 2.6e-19
gi 137942191 gb EBW88167.1	hypothetical protein G (200)	456 104.0 8.1e-20	gi 138956668 gb ECG58149.1	hypothetical protein G (287)	450 102.8 2.6e-19
gi 137958827 gb EBW97523.1	hypothetical protein G (284)	458 104.5 8.3e-20	gi 139642797 gb ECG46468.1	hypothetical protein G (249)	449 102.6 2.7e-19
gi 141314678 gb ECQ98633.1	hypothetical protein G (296)	458 104.5 8.6e-20	gi 134872282 gb EB098642.1	hypothetical protein G (269)	449 102.6 2.9e-19
gi 139068047 gb ECD19190.1	hypothetical protein G (260)	457 104.2 8.8e-20	gi 140933952 gb ECQ94963.1	hypothetical protein G (279)	449 102.6 3e-19
gi 140658132 gb ECM61746.1	hypothetical protein G (198)	455 103.8 9.3e-20	gi 137360628 gb EBT66371.1	hypothetical protein G (286)	449 102.6 3e-19
gi 139916408 gb EBR66887.1	hypothetical protein G (281)	457 104.2 9.5e-20	gi 137939230 gb ECJ13944.1	hypothetical protein G (261)	448 102.4 3.2e-19
gi 135477800 gb EBH90218.1	hypothetical protein G (282)	457 104.2 9.5e-20	gi 114307433 gb ABT58676.1	3-phosphoshikimate 1-c (433)	451 103.1 3.3e-19
gi 143251258 gb EDD90204.1	hypothetical protein G (295)	457 104.3 9.9e-20	gi 138941425 gb ECC51619.1	hypothetical protein G (231)	447 102.1 3.4e-19
gi 137755595 gb EBV82450.1	hypothetical protein G (256)	456 104.0 1e-19	gi 136808175 gb EBQ54293.1	hypothetical protein G (275)	448 102.4 3.4e-19
gi 140772822 gb ECN40516.1	hypothetical protein G (189)	454 103.5 1e-19	gi 139354446 gb ECG60428.1	hypothetical protein G (325)	449 102.6 3.4e-19
gi 139076956 gb ECD25149.1	hypothetical protein G (278)	456 104.0 1.1e-19	gi 137557298 gb EBU73902.1	hypothetical protein G (277)	448 102.4 3.4e-19
gi 137755595 gb EBV82450.1	hypothetical protein G (281)	456 104.0 1.1e-19	gi 144114046 gb EDI96547.1	hypothetical protein G (200)	446 101.9 3.4e-19
gi 138685421 gb ECB29910.1	hypothetical protein G (240)	455 103.8 1.1e-19	gi 139152261 gb ECQ76059.1	hypothetical protein G (285)	448 102.4 3.5e-19
gi 136830333 gb EBG69060.1	hypothetical protein G (158)	452 103.1 1.2e-19	gi 139991868 gb ECI87059.1	hypothetical protein G (248)	447 102.1 3.6e-19
gi 189915141 gb ACE611393.1	3-phosphoshikimate 1-c (432)	458 104.5 1.2e-19	gi 139188209 gb ECB01339.1	hypothetical protein G (187)	445 101.7 3.7e-19
gi 165876218 gb ABX69266.1	3-phosphoshikimate 1-c (432)	458 104.5 1.2e-19	gi 139750669 gb ECH20532.1	hypothetical protein G (262)	447 102.2 3.8e-19
gi 141749797 gb ECT09608.1	hypothetical protein G (135)	451 102.9 1.2e-19	gi 140114936 gb ECJ63978.1	hypothetical protein G (286)	447 102.2 4.1e-19
gi 136650971 gb EBF51388.1	hypothetical protein G (266)	455 103.8 1.2e-19	gi 137264374 gb EBT12455.1	hypothetical protein G (245)	446 101.9 4.1e-19
gi 135507167 gb EBT09057.1	hypothetical protein G (192)	453 103.3 1.2e-19	gi 138907009 gb ECC37100.1	hypothetical protein G (177)	444 101.5 4.1e-19
gi 141123028 gb ECP78588.1	hypothetical protein G (273)	455 103.8 1.2e-19	gi 140380447 gb ECJ38000.1	hypothetical protein G (292)	447 102.2 4.1e-19
gi 137030922 gb EBR81678.1	hypothetical protein G (276)	455 103.8 1.2e-19	gi 137450070 gb EBU16913.1	hypothetical protein G (251)	446 101.9 4.2e-19
gi 140653578 gb ECM58585.1	hypothetical protein G (171)	452 103.1 1.3e-19	gi 135666691 gb EBQ90399.1	hypothetical protein G (164)	443 101.2 4.5e-19
gi 89345096 gb ABD692299.1	3-phosphoshikimate 1-ca (669)	460 105.0 1.3e-19	gi 138677357 gb ECB24420.1	hypothetical protein G (279)	446 102.0 4.6e-19
gi 139760239 gb EDY47080.1	hypothetical protein G (253)	454 103.6 1.3e-19	gi 134673469 gb ECP7420.1	hypothetical protein G (181)	443 101.3 4.9e-19
gi 137426729 gb EBU03730.1	hypothetical protein G (261)	454 103.6 1.4e-19	gi 141113089 gb ECP71687.1	hypothetical protein G (155)	442 101.0 4.9e-19
gi 112822801 gb ABT24890.1	3-phosphoshikimate 1-c (432)	457 104.3 1.4e-19	gi 1890139 gb ABE86439.1	AroA [Mannheimia haemoly (432)	448 102.5 5e-19
gi 197698457 gb EDY45390.1	PimDK [Streptomyces sp (995)	462 105.5 1.4e-19	gi 138636499 gb ECA95841.1	hypothetical protein G (271)	445 101.7 5.2e-19
gi 138133963 gb EBX96411.1	hypothetical protein G (264)	454 103.6 1.4e-19	gi 139498755 gb ECP48542.1	hypothetical protein G (209)	443 101.3 5.5e-19
gi 138691138 gb ECB333980.1	hypothetical protein G (137)	450 102.7 1.4e-19	gi 140648727 gb ECM55237.1	hypothetical protein G (292)	445 101.8 5.5e-19
gi 145047091 gb ABP33718.1	3-phosphoshikimate 1-c (442)	457 104.3 1.4e-19	gi 139454391 gb ECF21324.1	hypothetical protein G (258)	444 101.5 5.7e-19
gi 134886066 gb EBE07800.1	hypothetical protein G (299)	454 103.6 1.5e-19	gi 135640463 gb EBI93148.1	hypothetical protein G (310)	445 101.8 5.8e-19
gi 126096971 gb ABN73799.1	3-phosphoshikimate 1-c (432)	456 104.1 1.6e-19	gi 142005931 gb ECU77145.1	hypothetical protein G (271)	444 101.5 6e-19
gi 144034657 gb EDI39331.1	hypothetical protein G (193)	451 102.9 1.6e-19	gi 148995007 gb AAT48249.1	chloroplast CP4-EPSPS f (141)	440 100.6 6e-19
gi 139051627 gb ECD07438.1	hypothetical protein G (276)	453 103.4 1.7e-19	gi 138333879 gb EBZ03751.1	hypothetical protein G (198)	442 101.1 6.1e-19
gi 139643546 gb ECG46969.1	hypothetical protein G (125)	448 102.2 1.7e-19	gi 140303989 gb ECR84652.1	hypothetical protein G (282)	444 101.5 6.2e-19
gi 137863910 gb EBW43621.1	hypothetical protein G (253)	452 103.2 1.8e-19	gi 1224964543 emb CAX56053.1	3-phosphoshikimate 1- (428)	446 102.0 6.6e-19
gi 142318022 gb ECX21690.1	hypothetical protein G (257)	452 103.2 1.8e-19	gi 143035975 gb EDC34531.1	hypothetical protein G (169)	440 100.6 7.1e-19
gi 137821808 gb EBW19362.1	hypothetical protein G (191)	450 102.7 1.9e-19	gi 139018177 gb ECC83955.1	hypothetical protein G (200)	441 100.9 7.1e-19
gi 137040706 gb EBR87177.1	hypothetical protein G (231)	451 103.0 1.9e-19	gi 138430761 gb EBZ62255.1	hypothetical protein G (255)	442 101.1 7.5e-19
gi 139125728 gb ECD58839.1	hypothetical protein G (167)	449 102.5 1.9e-19	gi 194682094 emb CAR41667.1	3-phosphoshikimate 1- (428)	445 101.8 7.7e-19
gi 141894283 gb ECT99317.1	hypothetical protein G (202)	450 102.7 1.9e-19	gi 37199250 dbj BAC95082.1	3-phosphoshikimate 1-c (428)	445 101.8 7.7e-19
gi 136801771 gb EBQ50060.1	hypothetical protein G (294)	452 103.2 2e-19	gi 153093746 gb EDN74689.1	3-phosphoshikimate 1-c (432)	445 101.8 7.7e-19
gi 134628386 gb EBC47961.1	hypothetical protein G (265)	451 103.0 2.1e-19	gi 138542053 gb ECA31262.1	hypothetical protein G (262)	444 101.1 7.7e-19
gi 139408555 gb ECE90996.1	hypothetical protein G (275)	451 103.0 2.2e-19	gi 139450344 gb ECR18445.1	hypothetical protein G (139)	438 100.2 7.9e-19
gi 269848851 gb ACZ49495.1	3-phosphoshikimate 1-c (458)	454 103.7 2.2e-19	gi 141128430 gb ECR26499.1	hypothetical protein G (284)	442 101.1 8.3e-19
gi 136936196 gb EBR28143.1	hypothetical protein G (178)	448 102.3 2.3e-19	gi 138972884 gb ECC65105.1	hypothetical protein G (184)	439 100.4 8.8e-19
gi 137060732 gb EBR98539.1	hypothetical protein G (215)	449 102.5 2.4e-19	gi 141367144 gb ECR33007.1	hypothetical protein G (258)	441 100.9 8.8e-19

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gi 140334517 gb ECL05827.1	hypothetical protein G (158)	438	100.2	8.9e-19	gi 134544087 gb EBB97350.1	hypothetical protein G (226)	435	99.6	1.9e-18
gi 138153319 gb EBY05062.1	hypothetical protein G (271)	441	100.9	9.2e-19	gi 144146470 gb EDU20240.1	hypothetical protein G (163)	433	99.2	1.9e-18
gi 138520206 gb ECA15974.1	hypothetical protein G (277)	441	100.9	9.4e-19	gi 138382720 gb EBZ28752.1	hypothetical protein G (193)	434	99.4	1.9e-18
gi 138911546 gb ECC39123.1	hypothetical protein G (256)	440	100.7	1e-18	gi 134711099 gb EBC96621.1	hypothetical protein G (236)	435	99.6	1.9e-18
gi 128806007 dbj BAC59283.1	3-phosphoshikimate 1-c (426)	443	101.4	1e-18	gi 1442459623 gb ECY233467.1	hypothetical protein G (144)	432	98.9	1.9e-18
gi 3008973 gb AAC10319.1	I72834 Sequence 4 from pa (434)	443	101.4	1e-18	gi 139957031 gb EC162788.1	hypothetical protein G (175)	432	99.2	2e-18
gi 3015354 gb AAC12234.1	I19200 Sequence 4 from pa (434)	443	101.4	1e-18	gi 191696897 gb ABE43726.1	3-phosphoshikimate 1-ca (668)	441	101.1	2e-18
gi 3940967 gb AAC1966.1	I96497 Sequence 4 from pa (434)	443	101.4	1e-18	gi 140083489 gb EC434144.1	hypothetical protein G (254)	435	99.7	2.1e-18
gi 1380395 gb ABA44849.1	Sequence 4 from patent U (434)	443	101.4	1e-18	gi 141776609 gb EC23341.1	hypothetical protein G (185)	433	99.2	2.1e-18
gi 451485 gb AAA21529.1	5-enolpyruvylshikimate 3- (434)	443	101.4	1e-18	gi 141987601 gb ECU64667.1	hypothetical protein G (219)	434	99.4	2.1e-18
gi 55616713 gb AAW04888.1	Sequence 2 from patent (434)	443	101.4	1e-18	gi 142732836 gb EDAL8046.1	hypothetical protein G (259)	435	99.7	2.1e-18
gi 5972478 gb AAE12369.1	Sequence 4 from patent U (434)	443	101.4	1e-18	gi 148719663 gb ABR00791.1	3-phosphoshikimate 1-c (432)	438	100.4	2.1e-18
gi 13561916 gb EBI44110.1	hypothetical protein G (270)	440	100.7	1.1e-18	gi 138888767 gb ECI15397.1	hypothetical protein G (161)	432	98.9	2.1e-18
gi 143482336 gb EDF22566.1	hypothetical protein G (275)	440	100.7	1.1e-18	gi 142596803 gb EC221432.1	hypothetical protein G (233)	434	99.4	2.2e-18
gi 134932131 gb EBB38383.1	hypothetical protein G (144)	436	99.8	1.1e-18	gi 139777013 gb ECH38737.1	hypothetical protein G (202)	433	99.2	2.3e-18
gi 137275963 gb EBT19032.1	hypothetical protein G (207)	438	100.2	1.1e-18	gi 140304325 gb ECR48887.1	hypothetical protein G (202)	433	99.2	2.3e-18
gi 146453322 gb EDK47578.1	pentafunctional AROM p (1551)	450	103.1	1.1e-18	gi 135717215 gb EBU40598.1	hypothetical protein G (251)	434	99.4	2.4e-18
gi 139639483 gb ECG44207.1	hypothetical protein G (255)	439	100.5	1.2e-18	gi 135377759 gb EBH23190.1	hypothetical protein G (183)	432	99.0	2.4e-18
gi 2484179 gb AAB72315.1	I49208 Sequence 61 from p (432)	442	101.2	1.2e-18	gi 163259926 emb CAP4227.1	3-phosphoshikimate 1- (447)	437	100.2	2.5e-18
gi 1488651 gb AAA24943.1	enolpyruvylshikimatephosph (432)	442	101.2	1.2e-18	gi 139865705 gb ECI00817.1	hypothetical protein G (165)	431	98.7	2.5e-18
gi 5957579 gb AAE08253.1	Sequence 61 from patent (432)	442	101.2	1.2e-18	gi 260220855 emb CBA28839.1	3-phosphoshikimate 1- (665)	439	100.7	2.7e-18
gi 144974758 gb ABP12469.1	Sequence 61 from patent (432)	442	101.2	1.2e-18	gi 141512033 gb ECS11482.1	hypothetical protein G (213)	432	99.0	2.7e-18
gi 40083323 gb AAR1877.1	Sequence 5147 from pate (434)	442	101.2	1.2e-18	gi 184372628 gb ABC56898.1	AroA [Methanospaera st (426)	436	100.0	2.8e-18
gi 139606942 gb ECG23026.1	hypothetical protein G (269)	439	100.5	1.2e-18	gi 145317961 gb ABF60108.1	3-phosphoshikimate 1-c (427)	436	100.0	2.8e-18
gi 138968495 gb ECC63182.1	hypothetical protein G (193)	437	100.0	1.2e-18	gi 1437115077 gb ED454632.1	hypothetical protein G (266)	433	99.2	2.9e-18
gi 138376657 gb EBZ24565.1	hypothetical protein G (201)	437	100.0	1.3e-18	gi 167323336 gb ABZ59929.1	Sequence 10728 from pa (443)	436	100.0	2.9e-18
gi 141291390 gb ECC89981.1	hypothetical protein G (149)	435	99.6	1.3e-18	gi 150837793 gb ABR71769.1	Prephenate dehydrogena (748)	439	100.7	2.9e-18
gi 140196807 gb ECC18245.1	hypothetical protein G (249)	438	100.3	1.3e-18	gi 1358252854 gb ECR85640.1	hypothetical protein G (279)	433	99.3	3e-18
gi 140940783 gb ECO54306.1	hypothetical protein G (213)	437	100.0	1.3e-18	gi 136829266 gb EB068345.1	hypothetical protein G (280)	433	99.3	3e-18
gi 262338316 gb ACY52111.1	5-Enolpyruvylshikimate (426)	441	101.0	1.4e-18	gi 139736854 gb ECH12243.1	hypothetical protein G (283)	433	99.3	3e-18
gi 142004810 gb ECU76380.1	hypothetical protein G (306)	439	100.5	1.4e-18	gi 163774845 gb EDQ88471.1	predicted protein [Mon (1520)	443	101.7	3.1e-18
gi 138538470 gb ECA28678.1	hypothetical protein G (278)	438	100.3	1.4e-18	gi 134548028 gb EBB99698.1	hypothetical protein G (176)	430	98.5	3.1e-18
gi 138337633 gb EBZ04990.1	hypothetical protein G (241)	437	100.1	1.5e-18	gi 139807487 gb ECH60283.1	hypothetical protein G (153)	429	98.3	3.2e-18
gi 136617331 gb EBP31472.1	hypothetical protein G (287)	438	100.3	1.7e-18	gi 139918409 gb ECI336300.1	hypothetical protein G (262)	432	99.0	3.3e-18
gi 136829494 gb EB068499.1	hypothetical protein G (245)	437	100.1	1.5e-18	gi 140679635 gb ECM77044.1	hypothetical protein G (136)	428	98.1	3.3e-18
gi 143161428 gb EDD26007.1	hypothetical protein G (246)	437	100.1	1.5e-18	gi 141831946 gb ECT55589.1	hypothetical protein G (161)	429	98.3	3.3e-18
gi 143553814 gb EDF60157.1	hypothetical protein G (295)	438	100.3	1.5e-18	gi 138293084 gb EBX83709.1	hypothetical protein G (230)	431	98.8	3.4e-18
gi 136327210 gb EBN41578.1	hypothetical protein G (182)	435	99.6	1.5e-18	gi 138544070 gb ECA32707.1	hypothetical protein G (298)	432	99.1	3.6e-18
gi 148716269 gb ABQ98479.1	3-phosphoshikimate 1-c (432)	440	100.8	1.6e-18	gi 138500221 gb EC0303654.1	hypothetical protein G (256)	431	98.8	3.7e-18
gi 16805025 gb AAH88278.1	3-phosphoshikimate 1-ca (432)	440	100.8	1.6e-18	gi 158523456 gb ABU70542.1	hypothetical protein V (426)	434	99.6	3.7e-18
gi 137262673 gb EBT11508.1	hypothetical protein G (262)	437	100.1	1.6e-18	gi 1218322092 emb CAV18185.1	3-phosphoshikimate 1- (426)	434	99.6	3.7e-18
gi 138671510 gb ECB20197.1	hypothetical protein G (268)	437	100.1	1.6e-18	gi 139955470 gb ECI61700.1	hypothetical protein G (160)	428	98.1	3.8e-18
gi 137492420 gb EBP39211.1	hypothetical protein G (276)	437	100.1	1.7e-18	gi 142699709 gb EC294320.1	hypothetical protein G (270)	431	98.8	3.9e-18
gi 146453336 gb EDK47592.1	pentafunctional AROM p (1551)	447	102.5	1.7e-18	gi 141373757 gb ECR37676.1	hypothetical protein G (152)	427	97.9	4.2e-18
gi 135614522 gb EBI77073.1	hypothetical protein G (238)	437	100.1	1.8e-18	gi 139552257 gb ECF85214.1	hypothetical protein G (261)	430	98.6	4.3e-18
gi 136650301 gb EBP50987.1	hypothetical protein G (254)	436	99.9	1.8e-18	gi 1399774316 gb ECI74913.1	hypothetical protein G (240)	429	98.4	4.7e-18
gi 138659889 gb ECB11911.1	hypothetical protein G (255)	436	99.9	1.8e-18	gi 139711446 gb ECG94601.1	hypothetical protein G (287)	430	98.6	4.7e-18
gi 138065352 gb EBX54709.1	hypothetical protein G (155)	433	99.1	1.8e-18	gi 140907504 gb EC030880.1	hypothetical protein G (287)	430	98.6	4.7e-18
gi 122088811 emb CAL11617.1	3-phosphoshikimate 1- (428)	439	100.6	1.8e-18	gi 138558546 gb ECA42855.1	hypothetical protein G (253)	429	98.4	4.9e-18
gi 143040406 gb EDC37793.1	hypothetical protein G (431)	439	100.6	1.8e-18	gi 139688350 gb ECG78743.1	hypothetical protein G (217)	428	98.2	4.9e-18
					gi 238546281 dbj BAH62632.1	3-phosphoshikimate 1- (427)	432	99.1	5e-18

gi 138813436 gb ECB97627.1	hypothetical protein G	(189)	427	97.9	5.1e-18	gi 139074825 gb ECD23598.1	hypothetical protein G	(255)	424	97.4	1e-17
gi 141561788 gb ECS38612.1	hypothetical protein G	(264)	429	98.4	5.1e-18	gi 164415617 gb ABV53228.1	3-phosphoshikimate 1-c	(437)	427	98.1	1e-17
gi 143330502 gb EDE37121.1	hypothetical protein G	(437)	432	99.1	5.1e-18	gi 142831753 gb EDA91373.1	hypothetical protein G	(193)	422	96.9	1.1e-17
gi 86569315 gb ABD13122.1	3-phosphoshikimate 1-ca	(446)	432	99.1	5.2e-18	gi 141595259 gb ECS05098.1	hypothetical protein G	(198)	422	96.9	1.1e-17
gi 141100594 gb ECP62927.1	hypothetical protein G	(230)	428	98.2	5.2e-18	gi 135493961 gb EBI04446.1	hypothetical protein G	(168)	421	96.7	1.1e-17
gi 135954943 gb EBK94850.1	hypothetical protein G	(237)	428	98.2	5.3e-18	gi 134900083 gb EBE17116.1	hypothetical protein G	(278)	424	97.4	1.1e-17
gi 143973335 gb EDH96102.1	hypothetical protein G	(179)	426	97.7	5.6e-18	gi 123762494 gb ACR01634.1	3-phosphoshikimate 1-c	(653)	429	98.6	1.1e-17
gi 138953444 gb ECC56703.1	hypothetical protein G	(250)	428	98.2	5.6e-18	gi 143027515 gb EDC28300.1	hypothetical protein G	(244)	423	97.2	1.1e-17
gi 139361912 gb ECE62605.1	hypothetical protein G	(257)	428	98.2	5.7e-18	gi 140734280 gb ECN15118.1	hypothetical protein G	(178)	421	96.7	1.1e-17
gi 119767369 gb ABU99939.1	3-phosphoshikimate 1-c	(428)	431	98.9	5.8e-18	gi 136101807 gb EBU92381.1	hypothetical protein G	(216)	422	96.9	1.2e-17
gi 169751429 gb ACA68947.1	3-phosphoshikimate 1-c	(428)	431	98.9	5.8e-18	gi 138842884 gb ECI12012.1	hypothetical protein G	(256)	423	97.2	1.2e-17
gi 152961130 gb ABS48591.1	3-phosphoshikimate 1-c	(428)	431	98.9	5.8e-18	gi 140331781 gb ECI03954.1	hypothetical protein G	(136)	419	96.2	1.2e-17
gi 186697859 gb ACC88488.1	3-phosphoshikimate 1-c	(428)	431	98.9	5.8e-18	gi 136184571 gb EBM45065.1	hypothetical protein G	(198)	421	96.7	1.2e-17
gi 515890371 emb CAH20655.1	3-phosphoshikimate 1-c	(428)	431	98.9	5.8e-18	gi 136760214 gb EBQ22187.1	hypothetical protein G	(277)	423	97.2	1.3e-17
gi 141265029 gb ECQ76941.1	hypothetical protein G	(220)	427	98.0	5.8e-18	gi 137684839 gb EBV44401.1	hypothetical protein G	(252)	422	97.0	1.3e-17
gi 119536596 gb ABU81213.1	3-phosphoshikimate 1-c	(430)	431	98.9	5.8e-18	gi 143575841 gb EDF71719.1	hypothetical protein G	(156)	419	96.2	1.4e-17
gi 120594658 gb ABM38097.1	3-phosphoshikimate 1-c	(667)	433	99.4	6.3e-18	gi 125622565 gb EAD50884.1	3-phosphoshikimate 1-c	(426)	425	97.7	1.4e-17
gi 160365739 gb ABX37352.1	3-phosphoshikimate 1-c	(675)	433	99.4	6.4e-18	gi 12485255 gb AAB73391.1	Sequence 60 from p	(427)	425	97.7	1.4e-17
gi 135460444 gb EBH78673.1	hypothetical protein G	(178)	425	97.5	6.4e-18	gi 144974757 gb ABF12468.1	Sequence 60 from p	(427)	425	97.7	1.4e-17
gi 1161308 gb AAB48057.1	5-enolpyruvylshikimate-3	(424)	430	98.7	6.6e-18	gi 2484178 gb AAB72314.1	Sequence 60 from p	(427)	425	97.7	1.4e-17
gi 108776396 gb ABG18915.1	3-phosphoshikimate 1-c	(428)	430	98.7	6.6e-18	gi 1555231 gb AAA27666.1	5-enolpyruvylshikimate 3-	(427)	425	97.7	1.4e-17
gi 145211273 gb ABF40680.1	3-phosphoshikimate 1-c	(428)	430	98.7	6.6e-18	gi 15957578 gb AAE08252.1	Sequence 60 from patent	(427)	425	97.7	1.4e-17
gi 115347149 emb CAL20042.1	3-phosphoshikimate 1-	(428)	430	98.7	6.6e-18	gi 168992013 gb ACA39553.1	3-phosphoshikimate 1-c	(186)	420	96.5	1.4e-17
gi 45435889 gb AAS61446.1	3-phosphoshikimate 1-ca	(428)	430	98.7	6.6e-18	gi 135914933 gb EBK67763.1	hypothetical protein G	(261)	422	97.0	1.4e-17
gi 108778591 gb ABG12649.1	3-phosphoshikimate 1-c	(428)	430	98.7	6.6e-18	gi 1574434 gb AAC23237.1	3-phosphoshikimate-1-car	(432)	425	97.7	1.4e-17
gi 262365043 gb ACV61600.1	3-phosphoshikimate 1-c	(428)	430	98.7	6.6e-18	gi 142684103 gb EC283120.1	hypothetical protein G	(223)	421	96.7	1.4e-17
gi 740564671 gb AA296907.1	3-phosphoshikimate 1-ca	(428)	430	98.7	6.6e-18	gi 139177896 gb EC094031.1	hypothetical protein G	(269)	422	97.0	1.4e-17
gi 262361421 gb ACH58142.1	3-phosphoshikimate 1-c	(428)	430	98.7	6.6e-18	gi 138646184 gb EC080436.1	hypothetical protein G	(269)	422	97.0	1.4e-17
gi 1623510171 gb ABX84965.1	3-phosphoshikimate 1-c	(428)	430	98.7	6.6e-18	gi 140412812 gb ECI59115.1	hypothetical protein G	(270)	422	97.0	1.4e-17
gi 2703443671 gb ACZ77132.1	3-phosphoshikimate 1-c	(429)	430	98.7	6.7e-18	gi 141109424 gb ECP69193.1	hypothetical protein G	(230)	421	96.7	1.4e-17
gi 219596751 gb AAM96335.1	5-enolpyruvylshikimate-1	(443)	430	98.7	6.8e-18	gi 134346105 gb EBA79260.1	hypothetical protein G	(272)	422	97.0	1.4e-17
gi 542087411 gb AAV31127.1	5-enolpyruvylshikimate-	(393)	429	98.5	7.1e-18	gi 139452944 gb ECP20286.1	hypothetical protein G	(283)	422	97.0	1.5e-17
gi 137209058 gb EBS81261.1	hypothetical protein G	(251)	426	97.8	7.5e-18	gi 119669775 emb CAL93688.1	3-phosphoshikimate 1-	(653)	427	98.2	1.5e-17
gi 139435660 gb ECF09838.1	hypothetical protein G	(252)	426	97.8	7.5e-18	gi 142646574 gb ECS56461.1	hypothetical protein G	(172)	419	96.3	1.5e-17
gi 1227009768 gb ACP05980.1	3-phosphoshikimate 1-c	(426)	429	98.5	7.6e-18	gi 140015718 gb ECJ02171.1	hypothetical protein G	(284)	422	97.0	1.5e-17
gi 254844554 gb EET22968.1	3-phosphoshikimate 1-c	(426)	429	98.5	7.6e-18	gi 140456534 gb ECI88212.1	hypothetical protein G	(146)	418	96.0	1.5e-17
gi 129370390 gb ACQ060813.1	5-Enolpyruvylshikimate	(426)	429	98.5	7.6e-18	gi 197317472 gb ACH66919.1	3-phosphoshikimate 1-c	(426)	424	97.5	1.6e-17
gi 150420105 gb EDN12408.1	3-phosphoshikimate 1-c	(426)	429	98.5	7.6e-18	gi 141204390 gb ECQ34073.1	hypothetical protein G	(186)	419	96.3	1.6e-17
gi 9656253 gb AAF94882.1	3-phosphoshikimate 1-car	(426)	429	98.5	7.6e-18	gi 40109989 gb AAR52369.1	Sequence 12086 from pat	(429)	424	97.5	1.6e-17
gi 150954342 gb ABR76132.1	3-phosphoshikimate 1-c	(427)	429	98.5	7.7e-18	gi 109701064 gb ABG40984.1	3-phosphoshikimate 1-c	(429)	424	97.5	1.6e-17
gi 141883060 gb ECT91476.1	hypothetical protein G	(277)	426	97.8	8.1e-18	gi 141581759 gb ECS46281.1	hypothetical protein G	(263)	421	96.8	1.6e-17
gi 140674293 gb ECM73199.1	hypothetical protein G	(236)	425	97.6	8.2e-18	gi 134676029 gb EBC075916.1	hypothetical protein G	(190)	419	96.3	1.6e-17
gi 161396468 gb AA45933.1	5-enolpyruvylshikimate	(413)	428	98.3	8.6e-18	gi 135704029 gb EBJ032424.1	hypothetical protein G	(267)	421	96.8	1.6e-17
gi 613964701 gb AA45934.1	5-enolpyruvylshikimate	(413)	428	98.3	8.6e-18	gi 134844834 gb EBB080509.1	hypothetical protein G	(270)	421	96.8	1.6e-17
gi 150424595 gb EDN16531.1	3-phosphoshikimate 1-c	(426)	428	98.3	8.8e-18	gi 141338053 gb ECI14097.1	hypothetical protein G	(139)	417	95.8	1.6e-17
gi 142755731 gb EDA34694.1	hypothetical protein G	(266)	425	97.9	9.1e-18	gi 134502363 gb EBB72448.1	hypothetical protein G	(273)	421	96.8	1.6e-17
gi 143015571 gb ECK92797.1	hypothetical protein G	(288)	425	97.6	9.1e-18	gi 138149138 gb EBY02182.1	hypothetical protein G	(201)	419	96.3	1.7e-17
gi 139820786 gb ECH69383.1	hypothetical protein G	(200)	422	97.1	9.4e-18	gi 61396474 gb AA45936.1	5-enolpyruvylshikimate	(413)	423	97.3	1.8e-17
gi 141162624 gb ECQ06320.1	hypothetical protein G	(170)	422	96.9	9.5e-18	gi 76875277 emb CAI86498.1	3-phosphoshikimate 1-c	(425)	423	97.3	1.8e-17
gi 140837662 gb ECN85695.1	hypothetical protein G	(246)	424	97.4	9.8e-18	gi 1229465653 gb ACQ67427.1	3-enolpyruvylshikimate	(428)	423	97.3	1.8e-17
gi 139887326 gb ECI14382.1	hypothetical protein G	(154)	421	96.6	1e-17	gi 253781755 emb CAQ84918.1	3-phosphoshikimate 1-	(431)	423	97.3	1.8e-17

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gi 1223692065 gb ACN15348.1	AroA [Desulfobacterium	(439)	423	97.3	1.9e-17	gi 140677578 gb ECM75581.1	hypothetical protein G	(179)	412	94.8	4.2e-17
gi 134889936 gb EBE10360.1	hypothetical protein G	(137)	416	95.6	1.9e-17	gi 161396462 gb AAX545930.1	5-enolpyruvylshikimate	(413)	417	96.0	4.2e-17
gi 137874616 gb EBW49779.1	hypothetical protein G	(136)	418	96.1	1.9e-17	gi 1247538562 gb ACT071183.1	3-phosphoshikimate 1-c	(429)	417	96.0	4.3e-17
gi 161396478 gb AAX45938.1	5-enolpyruvylshikimate	(413)	422	97.1	2e-17	gi 141587996 gb EC548226.1	hypothetical protein G	(278)	414	95.3	4.6e-17
gi 139491037 gb ECF43255.1	hypothetical protein G	(252)	419	96.3	2.1e-17	gi 138872276 gb EC23886.1	hypothetical protein G	(242)	413	95.1	4.7e-17
gi 134542621 gb EBB96479.1	hypothetical protein G	(238)	419	96.3	2.1e-17	gi 139504738 gb ECF52676.1	hypothetical protein G	(244)	413	95.1	4.7e-17
gi 137699902 gb EBV52881.1	hypothetical protein G	(188)	417	95.9	2.1e-17	gi 161396486 gb AAX45942.1	5-enolpyruvylshikimate	(413)	416	95.8	4.8e-17
gi 111152891 emb CAJ64639.1	3-phosphoshikimate 1-	(439)	422	97.1	2.2e-17	gi 1405040312 gb ECM15770.1	hypothetical protein G	(183)	411	94.6	4.9e-17
gi 138274656 gb EBY73771.1	hypothetical protein G	(267)	419	96.3	2.2e-17	gi 1205659939 gb ACT11715.1	3-phosphoshikimate 1-c	(427)	416	95.8	5e-17
gi 135809669 gb EBJ98309.1	hypothetical protein G	(270)	419	96.3	2.2e-17	gi 36784993 emb CAE13913.1	3-phosphoshikimate 1-c	(428)	416	95.8	5e-17
gi 143212084 gb EDD62644.1	hypothetical protein G	(194)	417	95.9	2.2e-17	gi 139938907 gb EC150641.1	hypothetical protein G	(268)	413	95.1	5.1e-17
gi 139386082 gb ECF76188.1	hypothetical protein G	(139)	415	95.4	2.2e-17	gi 144193827 gb EDU56799.1	hypothetical protein G	(405)	415	95.6	5.5e-17
gi 139584109 gb ECG07146.1	hypothetical protein G	(277)	419	96.3	2.2e-17	gi 140385024 gb ECU41258.1	hypothetical protein G	(178)	410	94.4	5.6e-17
gi 140698605 gb ECM90303.1	hypothetical protein G	(240)	418	96.1	2.3e-17	gi 138403520 gb EB243001.1	hypothetical protein G	(183)	410	94.4	5.7e-17
gi 140799955 gb ECN59593.1	hypothetical protein G	(147)	415	95.4	2.3e-17	gi 1228906411 gb EEH92329.1	5-enolpyruvylshikimate	(427)	415	95.6	5.8e-17
gi 134208048 gb EBB24938.1	hypothetical protein G	(210)	417	95.9	2.3e-17	gi 1251754698 gb ACT12774.1	3-phosphoshikimate 1-c	(429)	415	95.6	5.8e-17
gi 127013635 gb ACP09845.1	3-phosphoshikimate 1-c	(426)	421	96.8	2.4e-17	gi 122937807 gb ABM68632.1	plastid EPSP synthase	(514)	416	95.8	5.8e-17
gi 146315739 gb ABQ20278.1	3-phosphoshikimate 1-c	(426)	421	96.8	2.4e-17	gi 135003079 gb EBE86104.1	hypothetical protein G	(194)	410	94.4	6e-17
gi 137214858 gb EBE84591.1	hypothetical protein G	(162)	415	95.4	2.5e-17	gi 136022122 gb EBI38615.1	hypothetical protein G	(240)	411	94.7	6.2e-17
gi 141041963 gb ECP23312.1	hypothetical protein G	(163)	415	95.4	2.5e-17	gi 141161546 gb ECO05541.1	hypothetical protein G	(242)	411	94.7	6.3e-17
gi 36786091 emb CAE15143.1	unnamed protein produc	(451)	421	96.9	2.5e-17	gi 1404139894 gb EC163396.1	hypothetical protein G	(243)	411	94.7	6.3e-17
gi 178465351 gb AAZ46031.1	cytidylate kinase / 3-p	(643)	423	97.3	2.6e-17	gi 161396464 gb AAX45931.1	5-enolpyruvylshikimate	(413)	414	95.4	6.5e-17
gi 143269600 gb EDE03471.1	hypothetical protein G	(283)	418	96.1	2.6e-17	gi 140374552 gb ECU33774.1	hypothetical protein G	(153)	408	93.9	6.5e-17
gi 142982479 gb EDB96508.1	hypothetical protein G	(215)	416	95.7	2.8e-17	gi 143280338 gb EDS09543.1	hypothetical protein G	(155)	408	93.9	6.6e-17
gi 139522890 gb ECF65242.1	hypothetical protein G	(218)	416	95.7	2.8e-17	gi 111963689 gb ABH78640.1	Sequence 8483 from pat	(431)	414	95.4	6.7e-17
gi 15957577 gb AAE08251.1	Sequence 59 from patent	(427)	420	96.6	2.8e-17	gi 142870290 gb EBD16562.1	hypothetical protein G	(266)	411	94.7	6.8e-17
gi 5627601 emb CAA57812.1	3-phosphoshikimate 1-car	(427)	420	96.6	2.8e-17	gi 141087172 gb ECF53417.1	hypothetical protein G	(162)	408	94.0	6.8e-17
gi 1485254 gb AAB73390.1	Sequence 59 from p	(427)	420	96.6	2.8e-17	gi 139894040 gb ECI19042.1	hypothetical protein G	(199)	409	94.2	7.1e-17
gi 144974756 gb ABP12467.1	Sequence 59 from paten	(427)	420	96.6	2.8e-17	gi 140238212 gb ECC46609.1	hypothetical protein G	(211)	409	94.2	7.4e-17
gi 2484177 gb AAB72313.1	Sequence 59 from p	(427)	420	96.6	2.8e-17	gi 136855918 gb EB086151.1	hypothetical protein G	(254)	410	94.5	7.6e-17
gi 157083610 gb ABV13288.1	hypothetical protein C	(427)	420	96.6	2.8e-17	gi 139621088 gb ECG31545.1	hypothetical protein G	(182)	408	94.0	7.6e-17
gi 49612043 emb CAG75492.1	3-phosphoshikimate 1-c	(429)	420	96.6	2.8e-17	gi 136961527 gb EBR42455.1	hypothetical protein G	(184)	408	94.0	7.6e-17
gi 135408047 gb EBH43560.1	hypothetical protein G	(263)	417	95.9	2.8e-17	gi 139153582 gb ECD76894.1	hypothetical protein G	(219)	409	94.2	7.7e-17
gi 140173280 gb ECK01590.1	hypothetical protein G	(267)	417	95.9	2.9e-17	gi 167322676 gb ABZ59269.1	Sequence 10068 from pa	(428)	413	95.2	7.7e-17
gi 161396476 gb AAX45937.1	5-enolpyruvylshikimate	(413)	419	96.4	3.1e-17	gi 135668636 gb EBJ10592.1	hypothetical protein G	(281)	410	94.5	8.2e-17
gi 161396466 gb AAX45932.1	5-enolpyruvylshikimate	(413)	419	96.4	3.1e-17	gi 139007276 gb ECC76408.1	hypothetical protein G	(243)	409	94.2	8.4e-17
gi 161396472 gb AAX45935.1	5-enolpyruvylshikimate	(413)	419	96.4	3.1e-17	gi 1239801199 gb ACS18266.1	3-phosphoshikimate 1-c	(670)	415	95.7	8.5e-17
gi 161396460 gb AAX45929.1	5-enolpyruvylshikimate	(413)	419	96.4	3.1e-17	gi 4562051 emb CAA54317.1	5-enolpyruvylshikimate-3	(409)	412	95.0	8.5e-17
gi 161396458 gb AAX45928.1	5-enolpyruvylshikimate	(413)	419	96.4	3.1e-17	gi 135856027 gb EBK27473.1	hypothetical protein G	(215)	408	94.0	8.7e-17
gi 135610065 gb EBI74288.1	hypothetical protein G	(181)	414	95.2	3.2e-17	gi 134747467 gb EBD17355.1	hypothetical protein G	(183)	407	93.8	8.8e-17
gi 159480469 gb AAW86256.1	5-enolpyruvylshikimate-	(426)	419	96.4	3.2e-17	gi 1226714722 gb AC073860.1	AroA [Laribacter hongk	(428)	412	95.0	8.9e-17
gi 229378861 gb EEO28952.1	prephenate dehydrogena	(439)	419	96.4	3.3e-17	gi 139023026 gb ECC87309.1	hypothetical protein G	(161)	406	93.5	9.1e-17
gi 140301825 gb ECK83158.1	hypothetical protein G	(273)	416	95.7	3.4e-17	gi 137282407 gb EBT22623.1	hypothetical protein G	(118)	404	93.1	9.2e-17
gi 140667355 gb ECM68197.1	hypothetical protein G	(175)	413	95.0	3.6e-17	gi 139604357 gb ECG21255.1	hypothetical protein G	(240)	408	94.0	9.6e-17
gi 18957974 gb AAL79610.1	3-phosphoshikimate 1-ca	(428)	418	96.2	3.7e-17	gi 136604454 gb EBP23203.1	hypothetical protein G	(401)	411	94.8	9.7e-17
gi 135678884 gb EBU16882.1	hypothetical protein G	(222)	414	95.3	3.8e-17	gi 167294414 gb ABZ47278.1	Sequence 21216 from pa	(421)	411	94.8	1e-16
gi 158270965 gb AAW86256.1	5-enolpyruvylshikimate	(512)	419	96.5	3.8e-17	gi 138274368 gb EBY73567.1	hypothetical protein G	(256)	408	94.0	1e-16
gi 35186983 gb AAO84158.1	PlmJK [Streptomyces sp.	(1003)	423	97.4	3.8e-17	gi 141051049 gb ECP29554.1	hypothetical protein G	(223)	407	93.8	1e-16
gi 138432976 gb EBE263840.1	hypothetical protein G	(232)	414	95.3	3.9e-17	gi 138296295 gb EBE85353.1	hypothetical protein G	(139)	404	93.1	1.1e-16
gi 140740736 gb ECN19673.1	hypothetical protein G	(175)	412	94.8	4.1e-17	gi 134914016 gb EBE26328.1	hypothetical protein G	(175)	405	93.3	1.1e-16
gi 136039035 gb EBL49925.1	hypothetical protein G	(179)	412	94.8	4.2e-17	gi 141069352 gb ECP41137.1	hypothetical protein G	(183)	405	93.4	1.2e-16

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gi 188187784 gb ABD40781.1 3-phosphoshikimate 1-ca	(430)	410	94.6	1.2e-16	gi 124260205 gb ABM95199.1 3-phosphoshikimate 1-c	(674)	406	93.8	3.1e-16
gi 138340681 gb EBZ07096.1 hypothetical protein G	(136)	403	92.9	1.2e-16	gi 135610492 gb EBI74558.1 hypothetical protein G	(211)	399	92.1	3.1e-16
gi 137329660 gb EBF48876.1 hypothetical protein G	(161)	404	93.1	1.2e-16	gi 161396490 gb AAAX5944.1 5-enolpyruvylshikimate	(413)	403	93.1	3.2e-16
gi 135465600 gb EBH82121.1 hypothetical protein G	(266)	407	93.8	1.2e-16	gi 161396488 gb AAAX5943.1 5-enolpyruvylshikimate	(413)	403	93.1	3.2e-16
gi 229378960 gb EEO29051.1 prephenate dehydrogona	(440)	410	94.6	1.2e-16	gi 137219979 gb EBH87529.1 hypothetical protein G	(255)	400	92.4	3.2e-16
gi 141402472 gb EER57949.1 hypothetical protein G	(228)	406	93.6	1.2e-16	gi 179146801 gb AAZ34582.1 3-phosphoshikimate 1-ca	(424)	400	92.1	3.2e-16
gi 139132738 gb ECD62600.1 hypothetical protein G	(164)	404	93.1	1.2e-16	gi 136582315 gb EBP09076.1 hypothetical protein G	(218)	399	92.1	3.2e-16
gi 140169499 gb ECJ98961.1 hypothetical protein G	(237)	406	93.6	1.3e-16	gi 261372470 gb ACX75215.1 3-phosphoshikimate 1-c	(442)	403	93.1	3.3e-16
gi 140049962 gb ECU24138.1 hypothetical protein G	(240)	406	93.6	1.3e-16	gi 142661590 gb ECW67038.1 hypothetical protein G	(163)	397	91.7	3.4e-16
gi 143037211 gb CDC35437.1 hypothetical protein G	(174)	404	93.1	1.3e-16	gi 137401562 gb EBT89526.1 hypothetical protein G	(229)	399	92.2	3.4e-16
gi 496512071 emb CAG78144.1 YAL10F12639p [Yarrowia	(1556)	417	96.3	1.3e-16	gi 141869737 gb ECU82397.1 hypothetical protein G	(238)	399	92.2	3.5e-16
gi 161396480 gb AAAX45939.1 5-enolpyruvylshikimate	(413)	409	94.3	1.3e-16	gi 140163244 gb ECU96063.1 hypothetical protein G	(241)	399	92.2	3.5e-16
gi 135945291 gb EBK88343.1 hypothetical protein G	(254)	406	93.6	1.3e-16	gi 143418238 gb EDR85044.1 hypothetical protein G	(243)	399	92.2	3.5e-16
gi 137398175 gb EBT87602.1 hypothetical protein G	(257)	406	93.6	1.4e-16	gi 143173373 gb EDD34522.1 hypothetical protein G	(182)	397	91.7	3.7e-16
gi 140869146 gb ECO05747.1 hypothetical protein G	(169)	403	92.9	1.5e-16	gi 134895707 gb EBL14212.1 hypothetical protein G	(184)	397	91.7	3.7e-16
gi 135370189 gb EBH18092.1 hypothetical protein G	(254)	405	93.4	1.6e-16	gi 167353991 gb ABZ76604.1 3-phosphoshikimate 1-c	(426)	402	92.9	3.7e-16
gi 140317761 gb ECK94388.1 hypothetical protein G	(257)	405	93.4	1.6e-16	gi 58417478 emb CAI26682.1 3-phosphoshikimate 1-c	(427)	402	92.9	3.7e-16
gi 154205391 gb AAK97382.1 AF360730_1 5-enolpyruvyl	(427)	408	94.1	1.6e-16	gi 57160999 emb CAH57905.1 3-phosphoshikimate 1-c	(427)	402	92.9	3.7e-16
gi 88599102 gb ABD44571.1 putative 3-phosphoshiki	(428)	408	94.1	1.6e-16	gi 135563740 gb EBI45267.1 hypothetical protein G	(260)	399	92.2	3.8e-16
gi 56311966 emb CAT06611.1 3-phosphoshikimate 1-c	(646)	410	94.6	1.7e-16	gi 139566690 gb ECF95076.1 hypothetical protein G	(262)	399	92.2	3.8e-16
gi 61396482 gb AAAX5940.1 5-enolpyruvylshikimate	(413)	407	93.9	1.8e-16	gi 142002556 gb ECU74821.1 hypothetical protein G	(265)	399	92.2	3.8e-16
gi 140953256 gb ECO29388.1 hypothetical protein G	(256)	404	93.2	1.8e-16	gi 140710317 gb ECM98211.1 hypothetical protein G	(227)	398	91.9	3.9e-16
gi 261605294 gb ACX87780.1 3-phosphoshikimate 1-c	(429)	407	93.9	1.8e-16	gi 257477369 gb ACV57688.1 3-phosphoshikimate 1-c	(450)	402	92.9	3.9e-16
gi 137400223 gb EBT88769.1 hypothetical protein G	(282)	404	93.2	1.8e-16	gi 135898935 gb EBK56671.1 hypothetical protein G	(277)	399	92.2	4e-16
gi 61396486 gb AAAX5947.1 5-enolpyruvylshikimate	(413)	406	93.7	2e-16	gi 141085446 gb ECP52224.1 hypothetical protein G	(204)	397	91.7	4.1e-16
gi 61396496 gb AAAX5941.1 5-enolpyruvylshikimate	(413)	406	93.7	2e-16	gi 141091027 gb ECP56087.1 hypothetical protein G	(206)	397	91.7	4.1e-16
gi 142770656 gb EDA5614.1 hypothetical protein G	(186)	401	92.5	2.1e-16	gi 33148677 gb AAP96196.1 3-phosphoshikimate 1-ca	(435)	401	92.7	4.4e-16
gi 139589584 gb ECG11246.1 hypothetical protein G	(160)	403	92.3	2.1e-16	gi 138749005 gb ECB73949.1 hypothetical protein G	(225)	397	91.7	4.4e-16
gi 134455928 gb EBB45238.1 hypothetical protein G	(267)	400	93.0	2.2e-16	gi 135398882 gb EBK37393.1 hypothetical protein G	(267)	398	92.0	4.4e-16
gi 139078368 gb ECD26173.1 hypothetical protein G	(227)	402	92.8	2.2e-16	gi 138078915 gb EBX61317.1 hypothetical protein G	(162)	395	91.3	4.4e-16
gi 137841823 gb EBW30955.1 hypothetical protein G	(230)	402	92.8	2.2e-16	gi 134104358 gb AAQ60717.1 3-phosphoshikimate 1-ca	(456)	401	92.7	4.6e-16
gi 138139300 gb EBX96194.1 hypothetical protein G	(275)	403	93.0	2.2e-16	gi 135141355 gb EBF75716.1 hypothetical protein G	(169)	395	91.3	4.6e-16
gi 140449002 gb ECL82972.1 hypothetical protein G	(288)	403	93.0	2.3e-16	gi 140570131 gb ECM24965.1 hypothetical protein G	(204)	396	91.5	4.7e-16
gi 144124603 gb EDU04217.1 hypothetical protein G	(180)	400	92.3	2.4e-16	gi 134767539 gb EBD29427.1 hypothetical protein G	(257)	397	91.8	5e-16
gi 138542215 gb ECA31380.1 hypothetical protein G	(252)	402	92.8	2.4e-16	gi 143544422 gb EDF55404.1 hypothetical protein G	(189)	395	91.3	5.1e-16
gi 157317811 gb ABV36909.1 3-phosphoshikimate 1-c	(426)	405	93.5	2.4e-16	gi 140438577 gb ECL75479.1 hypothetical protein G	(268)	397	91.8	5.1e-16
gi 217498375 gb ACK46368.1 3-phosphoshikimate 1-c	(426)	405	93.5	2.4e-16	gi 139560754 gb ECF91299.1 hypothetical protein G	(227)	396	91.5	5.2e-16
gi 84779489 dbj BAB74266.1 3-phosphoshikimate 1-c	(435)	405	93.5	2.5e-16	gi 139398702 gb ECR84262.1 hypothetical protein G	(229)	396	91.5	5.2e-16
gi 140575918 gb ECM27279.1 hypothetical protein G	(268)	402	92.8	2.5e-16	gi 141988235 gb ECU65125.1 hypothetical protein G	(150)	393	90.8	5.5e-16
gi 139772528 gb ECH35546.1 hypothetical protein G	(269)	402	92.8	2.5e-16	gi 197053763 gb ACH25461.1 Sequence 13 from paten	(419)	399	92.3	5.7e-16
gi 138964745 gb ECC61414.1 hypothetical protein G	(164)	399	92.1	2.5e-16	gi 2621856 gb AAB83269.1 5-enolpyruvylshikimate 3	(419)	399	92.3	5.7e-16
gi 135066978 gb EBF28079.1 hypothetical protein G	(119)	397	91.6	2.6e-16	gi 167274362 gb ABZ27226.1 Sequence 1164 from pat	(419)	399	92.3	5.7e-16
gi 137241746 gb EBS99587.1 hypothetical protein G	(241)	401	92.6	2.6e-16	gi 134823747 gb EBB66695.1 hypothetical protein G	(255)	396	91.6	5.7e-16
gi 140283088 gb ECK73670.1 hypothetical protein G	(241)	401	92.6	2.6e-16	gi 145564830 gb ABP75765.1 3-phosphoshikimate 1-c	(426)	399	92.3	5.8e-16
gi 61396494 gb AAAX5946.1 5-enolpyruvylshikimate	(413)	404	93.3	2.7e-16	gi 134462524 gb EBB49131.1 hypothetical protein G	(220)	395	91.3	5.8e-16
gi 138522325 gb ECA17436.1 hypothetical protein G	(215)	400	92.3	2.8e-16	gi 218355966 emb CAQ88582.1 5-enolpyruvylshikimate	(434)	399	92.3	5.9e-16
gi 46914055 emb CAG20835.1 putative 3-phosphoshik	(428)	404	93.3	2.8e-16	gi 142902212 gb EDR39353.1 hypothetical protein G	(228)	399	91.3	6e-16
gi 142190157 gb ECW33272.1 hypothetical protein G	(439)	404	93.3	2.9e-16	gi 120590404 gb ABM33844.1 3-phosphoshikimate 1-c	(679)	401	92.8	6.5e-16
gi 141442027 gb ECR85618.1 hypothetical protein G	(163)	398	91.9	2.9e-16	gi 125997494 gb ABN61569.1 3-phosphoshikimate 1-c	(426)	398	92.1	6.7e-16
gi 138219010 gb EBY49364.1 hypothetical protein G	(193)	399	92.1	2.9e-16	gi 151424006 dbj BAF71509.1 3-phosphoshikimate 1-	(427)	398	92.1	6.7e-16
gi 139917801 gb ECI35869.1 hypothetical protein G	(239)	400	92.4	3e-16	gi 33113261 gb AAP94212.1 3-phosphoshikimate 1-ca	(427)	398	92.1	6.7e-16

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gi 156532856 gb ABU77682.1	hypothetical protein E	(428)	398 92.1 6.7e-16	gi 140767972 gb ECN37198.1	hypothetical protein G	(204)	389 90.1 1.3e-15
gi 142194251 gb ECW29626.1	hypothetical protein G	(439)	398 92.1 6.8e-16	gi 139024443 gb ECC88277.1	hypothetical protein G	(242)	390 90.3 1.3e-15
gi 142196972 gb ECW31688.1	hypothetical protein G	(439)	398 92.1 6.8e-16	gi 140374206 gb ECI33521.1	hypothetical protein G	(253)	390 90.3 1.3e-15
gi 170945047 emb CAP71158.1	unnamed protein produ	(1567)	405 93.8 7.5e-16	gi 135683728 gb EBJ19875.1	hypothetical protein G	(215)	389 90.1 1.3e-15
gi 61396492 gb AAX45945.1	5-enolpyruvylshikimate	(413)	397 91.9 7.5e-16	gi 812417201 gb ABB62430.1	5-enolpyruvylshikimate-	(424)	393 91.0 1.4e-15
gi 141237520 gb ECQ57335.1	hypothetical protein G	(217)	397 90.9 7.6e-16	gi 1208009607 emb CAJ79903.1	3-phosphoshikimate 1-	(427)	393 91.0 1.4e-15
gi 157846892 gb ABY87391.1	3-phosphoshikimate 1-c	(426)	397 91.9 7.7e-16	gi 91709413 gb ABE49341.1	3-phosphoshikimate 1-ca	(429)	393 91.0 1.4e-15
gi 120558876 gb ABM24803.1	3-phosphoshikimate 1-c	(426)	397 91.9 7.7e-16	gi 91709269 gb ABE49197.1	3-phosphoshikimate 1-ca	(429)	393 91.0 1.4e-15
gi 141399647 gb ECR55895.1	hypothetical protein G	(160)	391 90.4 7.8e-16	gi 137852928 gb EBW37332.1	hypothetical protein G	(221)	389 90.1 1.4e-15
gi 115404262 emb CAJ48961.1	3-phosphoshikimate 1-	(439)	397 91.9 7.9e-16	gi 85816343 gb ABC94481.1	putative 5-enolpyruvyls	(160)	387 89.6 1.4e-15
gi 142200197 gb ECW34167.1	hypothetical protein G	(439)	397 91.9 7.9e-16	gi 138831281 gb ECC06379.1	hypothetical protein G	(136)	386 89.3 1.4e-15
gi 142068853 gb ECV33175.1	hypothetical protein G	(449)	397 91.9 8e-16	gi 135593367 gb EBI613979.1	hypothetical protein G	(269)	386 89.3 1.4e-15
gi 138521898 gb ECA17149.1	hypothetical protein G	(236)	393 90.9 8.2e-16	gi 135512902 gb EBI12761.1	hypothetical protein G	(271)	390 90.3 1.4e-15
gi 142099007 gb ECV58104.1	hypothetical protein G	(173)	391 90.4 8.4e-16	gi 142263836 gb ECW81652.1	hypothetical protein G	(140)	386 89.4 1.4e-15
gi 136122103 gb EEM06235.1	hypothetical protein G	(253)	393 90.9 8.7e-16	gi 140889253 gb ECOL19651.1	hypothetical protein G	(273)	390 90.3 1.4e-15
gi 139732399 gb ECH09160.1	hypothetical protein G	(255)	393 90.9 8.8e-16	gi 138641134 gb ECA98932.1	hypothetical protein G	(197)	388 89.8 1.4e-15
gi 167294358 gb ABZ47222.1	Sequence 21160 from pa	(425)	396 91.7 8.9e-16	gi 137525040 gb EBU56039.1	hypothetical protein G	(286)	390 90.3 1.5e-15
gi 136993418 gb EBR60500.1	hypothetical protein G	(222)	392 90.7 9e-16	gi 139365969 gb ECB63735.1	hypothetical protein G	(206)	388 89.8 1.5e-15
gi 335041861 emb CAD83448.1	3-phosphoshikimate 1-c	(433)	396 91.7 9e-16	gi 137098844 gb EBJ19574.1	hypothetical protein G	(208)	388 89.8 1.5e-15
gi 142171806 gb ECW12483.1	hypothetical protein G	(435)	396 91.7 9e-16	gi 139515492 gb ECF60106.1	hypothetical protein G	(149)	386 89.4 1.5e-15
gi 2484182 gb AAB72318.1	Sequence 64 from p	(442)	396 91.7 9.2e-16	gi 257759305 dbj BAI29802.1	5-enolpyruvylshikimate	(427)	392 90.8 1.6e-15
gi 2485259 gb AAB73395.1	Sequence 64 from p	(442)	396 91.7 9.2e-16	gi 1218360262 emb CAQ97812.1	5-enolpyruvylshikimate	(427)	392 90.8 1.6e-15
gi 5957592 gb AAE08256.1	Sequence 64 from patent	(442)	396 91.7 9.2e-16	gi 1787137 gb AAC73994.1	5-enolpyruvylshikimate-3	(427)	392 90.8 1.6e-15
gi 144037 gb AAA22968.1	5-enolpyruvylshikimate-3-	(442)	396 91.7 9.2e-16	gi 197053764 gb ACH25462.1	Sequence 14 from paten	(427)	392 90.8 1.6e-15
gi 144974761 gb ABC12472.1	Sequence 64 from patent	(442)	396 91.7 9.2e-16	gi 209774902 gb ACI85763.1	5-enolpyruvylshikimate 1-	(427)	392 90.8 1.6e-15
gi 857227501 gb ABC77693.1	3-phosphoshikimate-1-ca	(446)	396 91.7 9.2e-16	gi 209911417 dbj BAG76491.1	3-phosphoshikimate 1-	(427)	392 90.8 1.6e-15
gi 167281308 gb ABZ34172.1	Sequence 8110 from pat	(416)	395 91.4 1e-15	gi 209161693 gb ACI39126.1	3-phosphoshikimate 1-c	(427)	392 90.8 1.6e-15
gi 14190121 gb ECQ25416.1	hypothetical protein G	(253)	392 90.7 1e-15	gi 209774900 gb ACI85762.1	5-enolpyruvylshikimate	(427)	392 90.8 1.6e-15
gi 141918038 gb ECU15844.1	hypothetical protein G	(257)	392 90.7 1e-15	gi 238859881 gb ACR61879.1	5-enolpyruvylshikimate	(427)	392 90.8 1.6e-15
gi 194342310 gb EDX23276.1	3-phosphoshikimate 1-c	(428)	395 91.4 1e-15	gi 73854941 gb AAZ87648.1	5-enolpyruvylshikimate-	(427)	392 90.8 1.6e-15
gi 242131724 gb ACS86026.1	3-phosphoshikimate 1-c	(429)	395 91.4 1e-15	gi 157077738 gb ABV17446.1	3-phosphoshikimate 1-c	(427)	392 90.8 1.6e-15
gi 139696464 gb ECG84097.1	hypothetical protein G	(188)	390 90.2 1e-15	gi 125140741 gb AAG55393.1	AE005280_4 5-enolpyruvyl	(427)	392 90.8 1.6e-15
gi 150840321 gb ABR74292.1	3-phosphoshikimate 1-c	(433)	395 91.4 1e-15	gi 1651430 dbj BAA35643.1	5-enolpyruvylshikimate-	(427)	392 90.8 1.6e-15
gi 138904179 gb ECC35826.1	hypothetical protein G	(242)	391 90.5 1.1e-15	gi 812460571 gb ABB66765.1	5-enolpyruvylshikimate-	(427)	392 90.8 1.6e-15
gi 139089556 gb ECD33905.1	hypothetical protein G	(244)	391 90.5 1.1e-15	gi 1254591507 gb ACT70868.1	3-phosphoshikimate 1-c	(427)	392 90.8 1.6e-15
gi 138376143 gb EBZ224210.1	hypothetical protein G	(214)	390 90.3 1.2e-15	gi 133604501 dbj BAB34414.1	5-enolpyruvylshikimate	(427)	392 90.8 1.6e-15
gi 1212556775 gb ACU29229.1	3-phosphoshikimate 1-c	(426)	394 91.2 1.2e-15	gi 1260449946 gb ACX40368.1	3-phosphoshikimate 1-c	(427)	392 90.8 1.6e-15
gi 135134197 gb EBF71145.1	hypothetical protein G	(430)	394 91.2 1.2e-15	gi 1218431432 emb CAR12310.1	5-enolpyruvylshikimate	(427)	392 90.8 1.6e-15
gi 262091733 gb ACY25322.1	3-phosphoshikimate 1-c	(370)	393 91.0 1.2e-15	gi 151133161 gb AAE68900.1	Sequence 7 from patent	(427)	392 90.8 1.6e-15
gi 140011396 gb ECI99246.1	hypothetical protein G	(226)	390 90.3 1.2e-15	gi 209774898 gb ACI85761.1	5-enolpyruvylshikimate	(427)	392 90.8 1.6e-15
gi 157935342 gb EDO91012.1	3-phosphoshikimate 1-c	(451)	394 91.2 1.2e-15	gi 187430562 gb ACD09836.1	3-phosphoshikimate 1-c	(427)	392 90.8 1.6e-15
gi 169653245 gb EDS585938.1	3-phosphoshikimate 1-c	(451)	394 91.2 1.2e-15	gi 218351113 emb CAU966817.1	5-enolpyruvylshikimate	(427)	392 90.8 1.6e-15
gi 765812671 gb ABA50742.1	3-phosphoshikimate 1-ca	(451)	394 91.2 1.2e-15	gi 209774906 gb ACI85765.1	5-enolpyruvylshikimate	(427)	392 90.8 1.6e-15
gi 157805653 gb EDO82823.1	3-phosphoshikimate 1-c	(451)	394 91.2 1.2e-15	gi 187430562 gb ACD09836.1	3-phosphoshikimate 1-c	(427)	392 90.8 1.6e-15
gi 126219794 gb ABN83300.1	3-phosphoshikimate 1-c	(451)	394 91.2 1.2e-15	gi 169888401 gb ACB02108.1	5-enolpyruvylshikimate	(427)	392 90.8 1.6e-15
gi 1237506815 gb ACQ99133.1	3-phosphoshikimate 1-c	(451)	394 91.2 1.2e-15	gi 257752848 dbj BAI24350.1	5-enolpyruvylshikimate	(427)	392 90.8 1.6e-15
gi 242139654 gb EES26056.1	3-phosphoshikimate 1-c	(451)	394 91.2 1.2e-15	gi 257763436 dbj BAI34931.1	5-enolpyruvylshikimate	(427)	392 90.8 1.6e-15
gi 254219427 gb EET08811.1	3-phosphoshikimate 1-c	(451)	394 91.2 1.2e-15	gi 167273981 gb ABZ26845.1	Sequence 783 from pate	(427)	392 90.8 1.6e-15
gi 184212268 gb EDU09311.1	3-phosphoshikimate 1-c	(451)	394 91.2 1.2e-15	gi 115250880 emb CAJ68705.1	3-phosphoshikimate 1-	(437)	392 90.8 1.6e-15
gi 126227113 gb ABN90653.1	3-phosphoshikimate 1-c	(451)	394 91.2 1.2e-15	gi 824112561 gb ABY75365.1	3-phosphoshikimate 1-ca	(437)	392 90.8 1.6e-15
gi 1383333550 gb EBZ02342.1	hypothetical protein G	(238)	390 90.3 1.3e-15	gi 143954156 gb EDH82710.1	hypothetical protein G	(136)	385 89.1 1.6e-15

gi 18598075 gb ABD43545.1 putative 3-phosphoshiki	(440)	392	90.8	1.6e-15	gi 140676897 gb ECM75089.1	hypothetical protein G	(127)	381	88.3	2.7e-15	
gi 13944952 gb ECF18163.1	hypothetical protein G	(239)	388	89.9	1.7e-15	gi 113772951 gb EBU75107.1	hypothetical protein G	(255)	385	89.3	2.8e-15
gi 140917730 gb ECO37955.1	hypothetical protein G	(236)	388	89.9	1.8e-15	gi 138122745 gb EBX87000.1	hypothetical protein G	(262)	385	89.3	2.8e-15
gi 135036529 gb EBF08664.1	hypothetical protein G	(423)	391	90.6	1.8e-15	gi 142161969 gb ECW04955.1	hypothetical protein G	(372)	387	89.8	2.9e-15
gi 151365419 gb ABS08419.1	3-phosphoshikimate 1-c	(426)	391	90.6	1.8e-15	gi 133571749 emb CAE41250.1	3-phosphoshikimate 1-c	(442)	388	90.0	2.9e-15
gi 1209774904 gb ACI185764.1	5-enolpyruvylshikimate	(427)	391	90.6	1.8e-15	gi 133576881 emb CAE33961.1	3-phosphoshikimate 1-c	(442)	388	90.0	2.9e-15
gi 13859585 gb AAC72854.1	3-enolpyruvylshikimate-5	(427)	391	90.6	1.8e-15	gi 152208740 emb CAH34676.1	putative 3-phosphoshik	(451)	388	90.0	3e-15
gi 19175109 gb ABE55035.1	3-phosphoshikimate 1-ca	(428)	391	90.6	1.8e-15	gi 140345209 gb ECU13444.1	hypothetical protein G	(196)	383	88.8	3e-15
gi 139203617 gb ECE11938.1	hypothetical protein G	(260)	388	89.9	1.8e-15	gi 143576125 gb EDF71819.1	hypothetical protein G	(172)	382	88.6	3e-15
gi 149905851 gb ABR36684.1	3-phosphoshikimate 1-c	(435)	391	90.6	1.9e-15	gi 137822467 gb EBW19744.1	hypothetical protein G	(110)	379	87.9	3.2e-15
gi 136974924 gb EBR50068.1	hypothetical protein G	(190)	386	89.4	1.9e-15	gi 137006884 gb EBE68201.1	hypothetical protein G	(215)	383	88.8	3.2e-15
gi 139984221 gb ECI18187.1	hypothetical protein G	(100)	382	88.5	1.9e-15	gi 134610603 gb EBC37222.1	hypothetical protein G	(258)	384	89.1	3.2e-15
gi 134450405 gb EBB41981.1	hypothetical protein G	(174)	385	89.2	2e-15	gi 1281178039 dbj BAI54369.1	3-phosphoshikimate 1-	(427)	387	89.8	3.3e-15
gi 135784761 gb EBJ782581.1	hypothetical protein G	(250)	387	89.7	2e-15	gi 253977137 gb ACT42807.1	3-phosphoshikimate 1-c	(427)	387	89.8	3.3e-15
gi 141500557 gb ECG07759.1	hypothetical protein G	(212)	386	89.4	2.1e-15	gi 157066110 gb ABV05365.1	3-phosphoshikimate 1-c	(427)	387	89.8	3.3e-15
gi 142771453 gb EDA46198.1	hypothetical protein G	(253)	387	89.7	2.1e-15	gi 1253325107 gb ACT29709.1	3-phosphoshikimate 1-c	(427)	387	89.8	3.3e-15
gi 137204744 gb EBS78807.1	hypothetical protein G	(155)	384	89.0	2.1e-15	gi 242376723 emb CAQ31436.1	aroA [Escherichia coli	(427)	387	89.8	3.3e-15
gi 300406688 gb AAP16419.1	5-enolpyruvylshikimate-	(427)	390	90.4	2.1e-15	gi 218370560 emb CAR18367.1	5-enolpyruvylshikimat	(427)	387	89.8	3.3e-15
gi 110614463 gb ABF03130.1	5-enolpyruvylshikimate	(427)	390	90.4	2.1e-15	gi 1253972923 gb ACT38594.1	3-phosphoshikimate 1-c	(427)	387	89.8	3.3e-15
gi 24051174 gb AA42533.1	5-enolpyruvylshikimate-	(427)	390	90.4	2.1e-15	gi 170521635 gb ACB19813.1	3-phosphoshikimate 1-c	(427)	387	89.8	3.3e-15
gi 260214683 emb CBA29637.1	3-phosphoshikimate 1-	(428)	390	90.4	2.1e-15	gi 169755618 gb ACA78317.1	3-phosphoshikimate 1-c	(427)	387	89.8	3.3e-15
gi 138644794 gb ECB01472.1	hypothetical protein G	(262)	387	89.7	2.1e-15	gi 142851614 gb ABO89935.1	3-phosphoshikimate 1-c	(427)	387	89.8	3.3e-15
gi 52307682 gb AAU38182.1	aroA protein [Mannheimi	(433)	390	90.4	2.2e-15	gi 129470333 gb AAC05428.1	3-enolpyruvylshikimate-5	(428)	387	89.8	3.3e-15
gi 6013215 gb AAF01290.1	AF182427_3 5-enolpyruvyls	(442)	390	90.4	2.2e-15	gi 21623205 gb AAM67855.1	3-phosphoshikimate 1-ca	(428)	387	89.8	3.3e-15
gi 139068739 gb ECD19686.1	hypothetical protein G	(163)	384	89.0	2.2e-15	gi 134963519 gb EBE59309.1	hypothetical protein G	(263)	384	89.1	3.3e-15
gi 138900787 gb ECC34332.1	hypothetical protein G	(232)	386	89.5	2.2e-15	gi 135653570 gb EBI45165.1	hypothetical protein G	(189)	382	88.6	3.3e-15
gi 140993087 gb ECO90844.1	hypothetical protein G	(152)	383	88.7	2.4e-15	gi 142367329 gb ECX56585.1	hypothetical protein G	(438)	387	89.8	3.3e-15
gi 110342697 gb ABG68934.1	3-phosphoshikimate 1-c	(427)	389	90.2	2.4e-15	gi 140310203 gb ECK88940.1	hypothetical protein G	(137)	380	88.1	3.3e-15
gi 215264105 emb CAS08449.1	5-enolpyruvylshikimat	(427)	389	90.2	2.4e-15	gi 133574090 emb CAE38415.1	3-phosphoshikimate 1-c	(442)	387	89.8	3.3e-15
gi 226898314 gb EEH84573.1	aroA [Escherichia sp.	(427)	389	90.2	2.4e-15	gi 141395406 gb ECR52919.1	hypothetical protein G	(125)	379	87.9	3.6e-15
gi 218426312 emb CAR07137.1	5-enolpyruvylshikimat	(427)	389	90.2	2.4e-15	gi 133774292 gb ECH36762.1	hypothetical protein G	(177)	381	88.4	3.6e-15
gi 91071583 gb ABE06464.1	3-phosphoshikimate 1-ca	(427)	389	90.2	2.4e-15	gi 12484150 gb AAB72286.1	Sequence 8 from patent U	(423)	386	89.6	3.7e-15
gi 218364582 emb CAR02268.1	5-enolpyruvylshikimat	(427)	389	90.2	2.4e-15	gi 12485227 gb AAB73363.1	Sequence 8 from pa	(423)	386	89.6	3.7e-15
gi 115512250 gb ABU00325.1	aroA [Escherichia coli	(427)	389	90.2	2.4e-15	gi 144974729 gb ABP12440.1	Sequence 8 from patent	(423)	386	89.6	3.7e-15
gi 138258528 gb EBY62639.1	hypothetical protein G	(260)	386	89.5	2.4e-15	gi 15957550 gb AAE08224.1	Sequence 8 from patent U	(423)	386	89.6	3.7e-15
gi 144114020 gb EDI96529.1	hypothetical protein G	(438)	389	90.2	2.5e-15	gi 409661 emb CAA25223.1	unnamed protein product l	(427)	386	89.6	3.8e-15
gi 151280371 gb ABR88781.1	3-phosphoshikimate 1-c	(441)	389	90.2	2.5e-15	gi 14731170 gb AAD28375.1	AF110153_2 5-enolpyruvyl	(428)	386	89.6	3.8e-15
gi 1480229460 gb EDK87365.1	3-phosphoshikimate 1-c	(451)	389	90.2	2.6e-15	gi 1238869916 gb ACR69627.1	3-phosphoshikimate 1-c	(428)	386	89.6	3.8e-15
gi 147750604 gb EDK57673.1	3-phosphoshikimate 1-c	(451)	389	90.2	2.6e-15	gi 71554514 gb AAZ33725.1	prephenate dehydrogenas	(366)	385	89.3	3.8e-15
gi 126241624 gb ABO04717.1	3-phosphoshikimate 1-c	(451)	389	90.2	2.6e-15	gi 141329021 gb ECR07965.1	hypothetical protein G	(264)	383	88.9	3.8e-15
gi 124291356 gb ABN00625.1	3-phosphoshikimate 1-c	(451)	389	90.2	2.6e-15	gi 141168332 gb ECQ10383.1	hypothetical protein G	(147)	379	87.9	4.1e-15
gi 121229589 gb ABW52107.1	3-phosphoshikimate 1-c	(451)	389	90.2	2.6e-15	gi 134685548 gb EBC81580.1	hypothetical protein G	(151)	379	87.9	4.2e-15
gi 160697726 gb EDP87696.1	3-phosphoshikimate 1-c	(451)	389	90.2	2.6e-15	gi 140659527 gb ECM62702.1	hypothetical protein G	(253)	382	88.6	4.3e-15
gi 147745264 gb EDK52344.1	3-phosphoshikimate 1-c	(451)	389	90.2	2.6e-15	gi 169212099 gb ACA49855.1	enolpyruvyl-shikimate	(427)	385	89.4	4.3e-15
gi 152428112 gb AAU48705.1	3-phosphoshikimate-1-ca	(451)	389	90.2	2.6e-15	gi 2262935015 gb ACQ92617.1	AroA [Edwardsiella tar	(428)	385	89.4	4.3e-15
gi 28852194 gb AAO55268.1	prephenate dehydrogenas	(535)	390	90.5	2.6e-15	gi 143270564 gb EDB04150.1	hypothetical protein G	(428)	385	89.4	4.3e-15
gi 139229948 gb ECE30111.1	hypothetical protein G	(234)	385	89.2	2.6e-15	gi 142089203 gb ECV49931.1	hypothetical protein G	(198)	380	88.2	4.6e-15
gi 144079528 gb ECU40341.1	hypothetical protein G	(242)	385	89.3	2.7e-15	gi 139503952 gb ECF52132.1	hypothetical protein G	(240)	381	88.4	4.7e-15
gi 141003121 gb ECO97873.1	hypothetical protein G	(242)	385	89.3	2.7e-15	gi 135563091 gb EBI44861.1	hypothetical protein G	(243)	381	88.4	4.7e-15
gi 136855917 gb EBQ86150.1	hypothetical protein G	(243)	385	89.3	2.7e-15	gi 137396460 gb EBT86593.1	hypothetical protein G	(247)	381	88.4	4.8e-15
gi 137366429 gb EBT69661.1	hypothetical protein G	(245)	385	89.3	2.7e-15	gi 221730036 gb ACM32856.1	3-phosphoshikimate 1-c	(673)	387	89.9	4.8e-15

gi 137245288 gb EBT01614.1	hypothetical protein G	(215)	380	88.2	4.9e-15	gi 141443182 gb ECR86432.1	hypothetical protein G	(146)	372	86.5	1.1e-14
gi 125715790 gb ABN54282.1	3-phosphoshikimate 1-c	(423)	384	89.2	5e-15	gi 135597997 gb EBI66840.1	hypothetical protein G	(244)	375	87.2	1.1e-14
gi 124388389 gb AAN5438.1	AE015681_2 3-phosphoshik	(426)	384	89.2	5e-15	gi 142746219 gb EDA27786.1	hypothetical protein G	(211)	374	86.9	1.2e-14
gi 138615794 gb ECA82879.1	hypothetical protein G	(225)	380	88.2	5.1e-15	gi 141055602 gb ECR32851.1	hypothetical protein G	(179)	373	86.7	1.2e-14
gi 134893001 gb EBE12405.1	hypothetical protein G	(137)	377	87.9	5.1e-15	gi 261246194 emb CBG23998.1	3-phosphoshikimate 1-	(427)	378	87.9	1.2e-14
gi 137545103 gb EBU66926.1	hypothetical protein G	(116)	376	87.2	5.1e-15	gi 1267992715 gb ACR87600.1	3-phosphoshikimate 1-c	(427)	378	87.9	1.2e-14
gi 138880582 gb ECG27596.1	hypothetical protein G	(270)	381	88.4	5.2e-15	gi 16419490 gb AAL19912.1	3-enolpyruvylshikimate-	(427)	378	87.9	1.2e-14
gi 163257580 gb AA338676.1	Prephenate dehydrogenas	(534)	385	89.4	5.3e-15	gi 138264743 gb EBY66745.1	hypothetical protein G	(161)	372	86.5	1.2e-14
gi 138512522 gb ECA10830.1	hypothetical protein G	(235)	380	88.2	5.3e-15	gi 139521800 gb ECF64621.1	hypothetical protein G	(271)	375	87.2	1.2e-14
gi 167273444 gb AB226308.1	Sequence 246 from pate	(341)	382	88.7	5.5e-15	gi 137798212 gb EBW05651.1	hypothetical protein G	(232)	374	87.0	1.2e-14
gi 17978913 gb AAL47682.1	5-enolpyruvylshikimate	(426)	383	89.0	5.8e-15	gi 1256363216 gb ACU76713.1	3-phosphoshikimate 1-c	(454)	378	87.9	1.3e-14
gi 160865242 gb ABX21865.1	hypothetical protein S	(427)	383	89.0	5.8e-15	gi 140433318 gb ECL71874.1	hypothetical protein G	(233)	374	87.0	1.3e-14
gi 123985497 gb ACT50354.1	3-phosphoshikimate 1-c	(432)	383	89.0	5.8e-15	gi 140890066 gb ECO20239.1	hypothetical protein G	(143)	371	86.2	1.3e-14
gi 260213106 emb CBE04506.1	3-phosphoshikimate 1-	(437)	383	89.0	5.9e-15	gi 141889995 gb ECT96217.1	hypothetical protein G	(237)	374	87.0	1.3e-14
gi 260209657 emb CBA63357.1	3-phosphoshikimate 1-	(437)	383	89.0	5.9e-15	gi 136313848 gb EBN33986.1	hypothetical protein G	(172)	372	86.5	1.3e-14
gi 1247534368 gb AC97614.1	3-phosphoshikimate 1-c	(441)	383	89.0	5.9e-15	gi 137234142 gb EB959536.1	hypothetical protein G	(242)	374	87.0	1.3e-14
gi 136238252 gb EBM81150.1	hypothetical protein G	(195)	378	87.8	6e-15	gi 140182536 gb ECK08290.1	hypothetical protein G	(206)	373	86.7	1.3e-14
gi 138795121 gb ECB89349.1	hypothetical protein G	(235)	379	88.0	6.1e-15	gi 143676232 gb EDG21149.1	hypothetical protein G	(152)	371	86.3	1.3e-14
gi 145301223 gb ECK82759.1	hypothetical protein G	(210)	378	87.8	6.4e-15	gi 142342306 gb ECX39599.1	hypothetical protein G	(214)	373	86.7	1.3e-14
gi 1405109881 gb ABT06556.1	Sequence 10 from paten	(426)	382	88.7	6.7e-15	gi 137786059 gb EBV98729.1	hypothetical protein G	(156)	371	86.3	1.4e-14
gi 11913995 gb ABH66278.1	Sequence 10 from paten	(426)	382	88.7	6.7e-15	gi 62127135 gb AA54838.1	3-enolpyruvylshikimate-	(427)	377	87.7	1.4e-14
gi 3452007 gb AC332745.1	EPSP synthase AroA [Shig	(427)	382	88.7	6.7e-15	gi 161364150 gb ABX67918.1	hypothetical protein S	(427)	377	87.7	1.4e-14
gi 190687453 gb ACE85131.1	3-phosphoshikimate 1-c	(428)	382	88.7	6.7e-15	gi 194404814 gb ACF65036.1	3-phosphoshikimate 1-c	(427)	377	87.7	1.4e-14
gi 140343221 gb ECL12005.1	hypothetical protein G	(262)	379	88.0	6.7e-15	gi 1224467314 gb ACN45144.1	3-phosphoshikimate 1-c	(427)	377	87.7	1.4e-14
gi 139532179 gb ECF71291.1	hypothetical protein G	(222)	378	87.8	6.8e-15	gi 142942923 gb EDB68713.1	hypothetical protein G	(264)	374	87.0	1.4e-14
gi 137447190 gb EBU15268.1	hypothetical protein G	(268)	379	88.0	6.9e-15	gi 142317060 gb ECX20980.1	hypothetical protein G	(119)	369	85.8	1.4e-14
gi 140209686 gb ECK27413.1	hypothetical protein G	(176)	376	87.3	7.4e-15	gi 140013850 gb ECU00937.1	hypothetical protein G	(203)	372	86.5	1.5e-14
gi 262109647 gb EEY67699.1	pentafunctional AROM p	(1548)	389	90.5	7.4e-15	gi 126638175 gb ABO23818.1	3-phosphoshikimate 1-c	(426)	376	87.5	1.6e-14
gi 160861032 gb ABX49566.1	3-phosphoshikimate 1-c	(426)	381	88.5	7.7e-15	gi 139996187 gb ECT910104.1	hypothetical protein G	(158)	370	86.1	1.6e-14
gi 267988183 gb ACY85012.1	3-phosphoshikimate 1-c	(428)	381	88.5	7.7e-15	gi 261413785 gb ACX83156.1	3-phosphoshikimate 1-c	(443)	376	87.5	1.6e-14
gi 134570021 gb ECG13008.1	hypothetical protein G	(262)	378	87.8	7.8e-15	gi 183580816 dbj BAG29287.1	3-phosphoshikimate 1-	(445)	376	87.5	1.7e-14
gi 139589855 gb ECG11247.1	hypothetical protein G	(162)	375	87.1	7.9e-15	gi 194343512 gb EDX24478.1	3-phosphoshikimate 1-c	(450)	376	87.5	1.7e-14
gi 229374383 gb EEO24774.1	3-phosphoshikimate 1-c	(443)	381	88.5	8e-15	gi 134743039 gb EBD15968.1	hypothetical protein G	(248)	372	86.6	1.8e-14
gi 139590611 gb ECG11788.1	hypothetical protein G	(126)	373	86.6	8.5e-15	gi 135581832 gb EBI56856.1	hypothetical protein G	(211)	371	86.3	1.8e-14
gi 135392272 gb EBH32957.1	hypothetical protein G	(215)	376	87.4	8.8e-15	gi 137056263 gb EBR96016.1	hypothetical protein G	(254)	372	86.6	1.8e-14
gi 141407657 gb ECR61667.1	hypothetical protein G	(257)	377	87.6	8.9e-15	gi 142778570 gb EDS45151.1	hypothetical protein G	(154)	369	85.8	1.8e-14
gi 138839333 gb ECC10257.1	hypothetical protein G	(156)	374	86.9	8.9e-15	gi 197213620 gb ACH51017.1	3-phosphoshikimate 1-c	(427)	375	87.3	1.8e-14
gi 1593745 gb AAA55352.1	Sequence 4 from Patent EP	(427)	380	88.3	8.9e-15	gi 143182082 gb EDD40705.1	hypothetical protein G	(188)	370	86.1	1.9e-14
gi 125595950 gb EAX35730.1	hypothetical protein O	(506)	381	88.6	8.9e-15	gi 143912469 gb EDH52565.1	hypothetical protein G	(434)	375	87.3	1.9e-14
gi 141828747 gb ECT53330.1	hypothetical protein G	(161)	374	86.9	9.1e-15	gi 137553390 gb EBU71649.1	hypothetical protein G	(224)	371	86.3	1.9e-14
gi 140376762 gb ECL35372.1	hypothetical protein G	(191)	375	87.1	9.1e-15	gi 140215326 gb ECK31463.1	hypothetical protein G	(168)	369	85.9	1.9e-14
gi 134567711 gb EBG11607.1	hypothetical protein G	(226)	376	87.4	9.2e-15	gi 139503982 gb ECF52152.1	hypothetical protein G	(240)	371	86.3	2e-14
gi 135681953 gb EBU18772.1	hypothetical protein G	(170)	374	86.9	9.5e-15	gi 140386793 gb ECU42479.1	hypothetical protein G	(147)	368	85.6	2e-14
gi 136386119 gb EBN81787.1	hypothetical protein G	(171)	374	86.9	9.6e-15	gi 136199323 gb EBM54861.1	hypothetical protein G	(175)	369	85.9	2e-14
gi 136202243 gb EBM56814.1	hypothetical protein G	(203)	375	87.1	9.6e-15	gi 141237519 gb ECY57534.1	hypothetical protein G	(211)	370	86.1	2e-14
gi 140259294 gb ECK61125.1	hypothetical protein G	(244)	376	87.4	9.8e-15	gi 261354892 gb EEY17320.1	pentafunctional AROM p	(1574)	382	89.0	2.1e-14
gi 194407735 gb ACF67954.1	3-phosphoshikimate 1-c	(427)	379	88.1	1e-14	gi 150837332 gb ABR71308.1	3-phosphoshikimate 1-c	(425)	374	87.1	2.1e-14
gi 194712899 gb ACF92120.1	3-phosphoshikimate 1-c	(427)	379	88.1	1e-14	gi 269413 gb AAA01407.1	Sequence 3 from Patent US	(427)	374	87.1	2.1e-14
gi 142607846 gb EC229157.1	hypothetical protein G	(192)	374	86.9	1.1e-14	gi 138754029 gb ECB75799.1	hypothetical protein G	(263)	371	86.4	2.1e-14
gi 140146263 gb ECU83031.1	hypothetical protein G	(167)	373	86.7	1.1e-14	gi 141350069 gb ECR21238.1	hypothetical protein G	(160)	368	85.6	2.2e-14
gi 137244587 gb EBT01212.1	hypothetical protein G	(238)	375	87.2	1.1e-14	gi 142827467 gb EDA88112.1	hypothetical protein G	(265)	371	86.4	2.2e-14

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gi 140428372 gb ECL68838.1	hypothetical protein G (236)	370 86.1 2.3e-14	gi 1219624517 gb ACL30672.1	3-phosphoshikimate 1-c (427)	369 86.0 4.3e-14
gi 137239373 gb EBS98468.1	hypothetical protein G (174)	368 85.7 2.3e-14	gi 142950535 gb EDB74156.1	hypothetical protein G (159)	363 84.6 4.4e-14
gi 141550593 gb ECS30851.1	hypothetical protein G (209)	369 85.9 2.3e-14	gi 1134379630 gb EBB01958.1	hypothetical protein G (434)	369 86.0 4.4e-14
gi 135964545 gb EBL01341.1	hypothetical protein G (178)	368 85.7 2.4e-14	gi 1145689057 gb ABR89563.1	5-enolpyruvylshikimate (164)	363 84.6 4.5e-14
gi 142038696 gb ECV07294.1	hypothetical protein G (426)	373 86.9 2.4e-14	gi 1142660287 gb EC661425.1	hypothetical protein G (171)	363 84.6 4.7e-14
gi 113884944 gb AB138996.1	3-phosphoshikimate 1-c (426)	373 86.9 2.4e-14	gi 1140955222 gb EC664409.1	hypothetical protein G (240)	365 85.1 4.7e-14
gi 113888993 gb AB143044.1	3-phosphoshikimate 1-c (426)	373 86.9 2.4e-14	gi 1135256647 gb EBG46395.1	hypothetical protein G (263)	365 85.1 5.1e-14
gi 117612752 gb ABK48206.1	3-phosphoshikimate 1-c (426)	373 86.9 2.4e-14	gi 1197702692 gb EDY48504.1	3-phosphoshikimate 1-c (440)	368 85.8 5.2e-14
gi 143454987 gb EDF05938.1	hypothetical protein G (186)	368 85.7 2.4e-14	gi 1140310865 gb ECR89393.1	hypothetical protein G (226)	364 84.9 5.2e-14
gi 137987089 gb EBX13684.1	hypothetical protein G (221)	369 85.9 2.5e-14	gi 1193222394 emb CAL62698.2	3-phosphoshikimate 1- (442)	368 85.8 5.2e-14
gi 137016135 gb EBR73396.1	hypothetical protein G (230)	369 85.9 2.5e-14	gi 1136044801 gb EBU53783.1	hypothetical protein G (269)	365 85.1 5.2e-14
gi 138907006 gb ECC37097.1	hypothetical protein G (149)	366 85.2 2.7e-14	gi 1138037253 gb EBX39901.1	hypothetical protein G (232)	364 84.9 5.3e-14
gi 120606889 gb ABM42629.1	3-phosphoshikimate 1-c (673)	375 87.4 2.7e-14	gi 1137883640 gb EBW54936.1	hypothetical protein G (243)	364 84.9 5.5e-14
gi 120975650 gb EED93978.1	predicted protein [Rha (486)	373 86.9 2.7e-14	gi 1253983562 gb ACT48420.1	3-phosphoshikimate 1-c (426)	367 85.6 5.8e-14
gi 135052511 gb EBF18868.1	hypothetical protein G (422)	372 86.7 2.8e-14	gi 1142544985 gb ECR85240.1	hypothetical protein G (137)	360 83.9 6e-14
gi 140303484 gb ECK84310.1	hypothetical protein G (256)	369 85.9 2.8e-14	gi 1256686562 gb ACV09455.1	3-phosphoshikimate 1-c (446)	367 85.6 6e-14
gi 171147195 gb AAZ27668.1	3-phosphoshikimate 1-ca (426)	372 86.7 2.8e-14	gi 1137524207 gb EBU55586.1	hypothetical protein G (164)	361 84.2 6e-14
gi 135876 gb AA27028.1	5-enolpyruvylshikimate-3- (427)	372 86.7 2.8e-14	gi 1139462417 gb ECR27014.1	hypothetical protein G (229)	363 84.7 6e-14
gi 1781351 emb CAA71382.1	aroA [Salmonella typhim (427)	372 86.7 2.8e-14	gi 1142757194 gb EDR35755.1	hypothetical protein G (229)	363 84.7 6e-14
gi 140064591 gb ECU31472.1	hypothetical protein G (222)	368 85.7 2.9e-14	gi 1139532178 gb ECR71290.1	hypothetical protein G (235)	367 84.7 6.2e-14
gi 139934982 gb ECT47822.1	hypothetical protein G (239)	368 85.7 3e-14	gi 1224213069 gb ACM49092.1	3-phosphoshikimate 1-c (462)	367 85.6 6.2e-14
gi 138215696 gb EBY47061.1	hypothetical protein G (128)	364 84.8 3.2e-14	gi 1140315884 gb ECR93023.1	hypothetical protein G (242)	367 84.7 6.3e-14
gi 1593743 gb AA55350.1	Sequence 2 from Patent EP (427)	371 86.5 3.3e-14	gi 1135427661 gb EBH56773.1	hypothetical protein G (127)	359 83.7 6.4e-14
gi 135273602 gb EBG56384.1	hypothetical protein G (263)	368 85.7 3.3e-14	gi 1138393430 gb EBR36056.1	hypothetical protein G (152)	360 84.0 6.5e-14
gi 143181940 gb EDS40611.1	hypothetical protein G (226)	367 85.5 3.3e-14	gi 1240857213 gb ACB54880.1	3-phosphoshikimate 1-c (420)	366 85.4 6.6e-14
gi 137056967 gb EBR96418.1	hypothetical protein G (223)	367 85.5 3.3e-14	gi 1124364003 gb ABN07811.1	3-phosphoshikimate 1-c (422)	366 85.4 6.6e-14
gi 141381885 gb ECR43532.1	hypothetical protein G (198)	366 85.3 3.4e-14	gi 141682065 gb ECS79110.1	hypothetical protein G (223)	362 84.5 6.8e-14
gi 139161830 gb ED82757.1	hypothetical protein G (174)	365 85.0 3.6e-14	gi 1136460127 gb EB030630.1	hypothetical protein G (383)	365 85.2 7e-14
gi 141159028 gb ECQ03748.1	hypothetical protein G (245)	367 85.5 3.6e-14	gi 1140421747 gb ECU64640.1	hypothetical protein G (175)	360 84.0 7.4e-14
gi 140604008 gb ECM35576.1	hypothetical protein G (183)	365 85.0 3.7e-14	gi 1136145599 gb EBM19604.1	hypothetical protein G (409)	365 85.2 7.4e-14
gi 12485252 gb AAB73388.1	Sequence 57 from patent (427)	370 86.2 3.8e-14	gi 1136106430 gb EBU95515.1	hypothetical protein G (110)	357 83.3 7.6e-14
gi 15957575 gb AAE08249.1	Sequence 57 from patent (427)	370 86.2 3.8e-14	gi 1169812004 gb ACA86588.1	3-phosphoshikimate 1-c (426)	365 85.2 7.7e-14
gi 1543661 gb AA27223.1	5-enolpyruvylshikimate 3- (427)	370 86.2 3.8e-14	gi 129138009 gb AAO69570.1	3-phosphoshikimate 1-ca (427)	365 85.2 7.7e-14
gi 15113317 gb AAE68901.1	Sequence 8 from patent (427)	370 86.2 3.8e-14	gi 1561282291 gb AAV77735.1	3-phosphoshikimate 1-ca (427)	365 85.2 7.7e-14
gi 1219621962 gb ACL30118.1	3-phosphoshikimate 1-c (427)	370 86.2 3.8e-14	gi 1197094372 emb CAR59885.1	3-phosphoshikimate 1- (427)	365 85.2 7.7e-14
gi 12484175 gb AAB72311.1	Sequence 57 from patent (427)	370 86.2 3.8e-14	gi 116502141 emb CAD05378.1	3-phosphoshikimate 1-c (427)	365 85.2 7.7e-14
gi 144974754 gb ABP12465.1	Sequence 57 from patent (427)	370 86.2 3.8e-14	gi 1193084121 gb ACF09788.1	3-phosphoshikimate 1-c (429)	365 85.2 7.8e-14
gi 1197940547 gb ACH77880.1	3-phosphoshikimate 1-c (427)	370 86.2 3.8e-14	gi 1135253730 gb EBG44676.1	hypothetical protein G (442)	365 85.2 8e-14
gi 1206708172 emb CAR32465.1	3-phosphoshikimate 1- (427)	370 86.2 3.8e-14	gi 1140302847 gb ECR83869.1	hypothetical protein G (227)	361 84.3 8e-14
gi 1205271966 emb CAR36810.1	3-phosphoshikimate 1- (427)	370 86.2 3.8e-14	gi 1108765521 gb ABG04403.1	3-phosphoshikimate 1-c (447)	365 85.2 8e-14
gi 1368774221 gb EBR00100.1	hypothetical protein G (262)	367 85.5 3.8e-14	gi 1197720164 gb EDY64072.1	3-phosphoshikimate 1-c (453)	365 85.2 8.1e-14
gi 137656038 gb EBV27947.1	hypothetical protein G (160)	364 84.8 3.8e-14	gi 1134799090 gb EBD51377.1	hypothetical protein G (141)	358 83.5 8.1e-14
gi 136301860 gb EBN24503.1	hypothetical protein G (236)	366 85.3 4e-14	gi 1141365559 gb ECR31937.1	hypothetical protein G (235)	361 84.3 8.2e-14
gi 1672774301 gb ABZ30294.1	Sequence 4232 from pat (1542)	377 88.0 4.2e-14	gi 1138406922 gb EBZ45453.1	hypothetical protein G (237)	367 84.3 8.3e-14
gi 137340742 gb EBT55118.1	hypothetical protein G (210)	365 85.1 4.2e-14	gi 1143923175 gb EDH60320.1	hypothetical protein G (244)	361 84.3 8.5e-14
gi 138153842 gb EBY05412.1	hypothetical protein G (179)	364 84.4 4.2e-14	gi 1139154621 gb ECD77605.1	hypothetical protein G (301)	362 84.5 8.8e-14
gi 135336773 gb EBG95699.1	hypothetical protein G (253)	366 85.3 4.3e-14	gi 1137794484 gb EBW03536.1	hypothetical protein G (220)	360 84.0 9e-14
gi 142105911 gb ECV63243.1	hypothetical protein G (131)	362 84.4 4.3e-14	gi 1141205783 gb EC035040.1	hypothetical protein G (221)	360 84.0 9e-14
gi 139222176 gb ECB24995.1	hypothetical protein G (256)	366 85.3 4.3e-14	gi 1137796550 gb EBW04720.1	hypothetical protein G (222)	360 84.0 9e-14
gi 143926832 gb EDH63014.1	hypothetical protein G (426)	369 86.0 4.3e-14	gi 1142554251 gb ECY91763.1	hypothetical protein G (188)	359 83.8 9e-14
gi 10038984 dbj BAB13019.1	3-phosphoshikimate 1-c (427)	369 86.0 4.3e-14	gi 1117648862 gb ABX52964.1	3-phosphoshikimate 1-c (1004)	369 86.2 9.1e-14

gi 13862106 gb ECA92062.1	hypothetical protein G	(224)	360	84.0	9.1e-14	gi 143362591 gb EDE56421.1	hypothetical protein G	(410)	359	84.0	1.8e-13
gi 144012226 gb EDI23677.1	hypothetical protein G	(272)	361	84.3	9.3e-14	gi 138490939 gb EB98202.1	hypothetical protein G	(220)	355	83.0	1.8e-13
gi 141398247 gb ECR54893.1	hypothetical protein G	(119)	356	83.1	9.4e-14	gi 140733658 gb ECN14670.1	hypothetical protein G	(260)	356	83.2	1.8e-13
gi 138109040 gb EBX79294.1	hypothetical protein G	(246)	360	84.1	9.9e-14	gi 145305567 gb ABP56149.1	3-phosphoshikimate 1-c	(433)	359	84.0	1.9e-13
gi 136866671 gb EBQ93382.1	hypothetical protein G	(246)	360	84.1	9.9e-14	gi 149112975 gb EBE25634.1	hypothetical protein G	(423)	355	83.0	1.9e-13
gi 137544502 gb EBU57473.1	hypothetical protein G	(211)	359	83.8	1e-13	gi 137115528 gb EBE328958.1	hypothetical protein G	(160)	353	82.5	1.9e-13
gi 142010326 gb ECU80420.1	hypothetical protein G	(180)	358	83.6	1e-13	gi 138740065 gb ECB68288.1	hypothetical protein G	(160)	353	82.5	1.9e-13
gi 142080005 gb ECV42334.1	hypothetical protein G	(352)	362	84.5	1e-13	gi 127211471 gb AAK02923.1	AroA [Pasteurella multo	(440)	359	84.0	1.9e-13
gi 137161951 gb EBS56765.1	hypothetical protein G	(182)	358	83.6	1e-13	gi 140482318 gb ECU96816.1	hypothetical protein G	(226)	355	83.0	1.9e-13
gi 135179383 gb EBG00170.1	hypothetical protein G	(155)	357	83.3	1e-13	gi 197710217 gb EDY54251.1	3-phosphoshikimate 1-c	(441)	359	84.0	1.9e-13
gi 219547426 gb ACL117876.1	3-phosphoshikimate 1-c	(423)	363	84.8	1e-13	gi 139459145 gb ECR24711.1	hypothetical protein G	(228)	355	83.0	1.9e-13
gi 135951288 gb EBK92380.1	hypothetical protein G	(205)	358	83.6	1.1e-13	gi 137634728 gb EBV17335.1	hypothetical protein G	(232)	355	83.0	1.9e-13
gi 137326809 gb EBT47329.1	hypothetical protein G	(250)	359	83.9	1.2e-13	gi 138811671 gb ECB96825.1	hypothetical protein G	(232)	355	83.0	1.9e-13
gi 136647641 gb EBP49413.1	hypothetical protein G	(257)	359	83.9	1.2e-13	gi 115255367 emb CAK06442.1	putative 3-phosphoshi	(420)	358	83.8	2.1e-13
gi 140376968 gb ECL35520.1	hypothetical protein G	(219)	358	83.6	1.2e-13	gi 18546878 emb CAB94597.1	3-phosphoshikimate 1-ca	(438)	358	83.8	2.2e-13
gi 138112315 gb EBS81121.1	hypothetical protein G	(133)	355	82.9	1.2e-13	gi 137500712 gb EBU43450.1	hypothetical protein G	(138)	351	82.1	2.2e-13
gi 227453530 gb ACP32283.1	3-phosphoshikimate 1-c	(434)	362	84.6	1.2e-13	gi 144102999 gb EDT88610.1	hypothetical protein G	(118)	350	81.8	2.2e-13
gi 137840358 gb EBW30125.1	hypothetical protein G	(142)	355	82.9	1.3e-13	gi 141573502 gb EC542616.1	hypothetical protein G	(141)	351	82.1	2.2e-13
gi 135600501 gb EBT68434.1	hypothetical protein G	(235)	358	83.6	1.3e-13	gi 135777069 gb EBJ77694.1	hypothetical protein G	(237)	354	82.8	2.3e-13
gi 138737749 gb ECB66651.1	hypothetical protein G	(182)	356	83.2	1.4e-13	gi 135965679 gb EBU02113.1	hypothetical protein G	(174)	352	82.3	2.3e-13
gi 136940074 gb EBR30361.1	hypothetical protein G	(217)	357	83.4	1.4e-13	gi 140820545 gb ECN74010.1	hypothetical protein G	(206)	353	82.6	2.3e-13
gi 135035087 gb EBF07763.1	hypothetical protein G	(426)	361	84.4	1.4e-13	gi 141423392 gb ECR76550.1	hypothetical protein G	(251)	354	82.8	2.4e-13
gi 47637 emb CAA38417.1	unnamed protein product	(427)	361	84.4	1.4e-13	gi 209533895 gb ACR753830.1	3-phosphoshikimate 1-c	(420)	357	83.5	2.4e-13
gi 2484193 gb AAB72319.1	Sequence 65 from p	(427)	361	84.4	1.4e-13	gi 137072304 gb EB505031.1	hypothetical protein G	(224)	353	82.6	2.5e-13
gi 24852610 gb AAB73396.1	Sequence 65 from p	(427)	361	84.4	1.4e-13	gi 141156551 gb EC001946.1	hypothetical protein G	(227)	353	82.6	2.5e-13
gi 15957576 gb AAE08250.1	Sequence 58 from patent	(427)	361	84.4	1.4e-13	gi 141794130 gb ECY32615.1	hypothetical protein G	(145)	350	81.9	2.6e-13
gi 237500387 gb ACO92980.1	3-phosphoshikimate 1-c	(427)	361	84.4	1.4e-13	gi 167292847 gb AB245711.1	Sequence 19649 from pa	(426)	356	83.3	2.8e-13
gi 144974762 gb ABP12473.1	Sequence 65 from patent	(427)	361	84.4	1.4e-13	gi 301809481 emb CAD85875.1	EFSP synthase (3-phosp	(431)	356	83.3	2.8e-13
gi 1485253 gb AAB73389.1	Sequence 58 from p	(427)	361	84.4	1.4e-13	gi 260647047 emb CBG70146.1	3-phosphoshikimate 1-	(443)	356	83.3	2.9e-13
gi 5957583 gb AAE08257.1	Sequence 65 from patent	(427)	361	84.4	1.4e-13	gi 143570931 gb EDF69343.1	hypothetical protein G	(138)	349	81.7	2.9e-13
gi 2484176 gb AAB72312.1	Sequence 58 from p	(427)	361	84.4	1.4e-13	gi 140395644 gb ECU48451.1	hypothetical protein G	(235)	352	82.4	3e-13
gi 144974755 gb ABP12466.1	Sequence 58 from patent	(427)	361	84.4	1.4e-13	gi 217410917 gb EEC50846.1	3-phosphoshikimate 1-c	(483)	356	83.4	3.1e-13
gi 142221780 gb ECW50540.1	hypothetical protein G	(434)	361	84.4	1.4e-13	gi 140960254 gb EC068025.1	hypothetical protein G	(254)	352	82.4	3.2e-13
gi 140996322 gb EC093156.1	hypothetical protein G	(194)	356	83.2	1.4e-13	gi 114334589 gb ABI71971.1	3-phosphoshikimate 1-c	(426)	355	83.1	3.3e-13
gi 142660118 gb EC266009.1	hypothetical protein G	(143)	354	82.7	1.5e-13	gi 119863478 gb ABM02955.1	3-phosphoshikimate 1-c	(428)	355	83.1	3.3e-13
gi 137413372 gb EBT96140.1	hypothetical protein G	(205)	356	83.2	1.5e-13	gi 238871683 gb ACR71393.1	3-phosphoshikimate 1-c	(431)	355	83.1	3.3e-13
gi 135145339 gb EBF78282.1	hypothetical protein G	(410)	360	84.2	1.5e-13	gi 135347203 gb EBH02679.1	hypothetical protein G	(222)	351	82.2	3.3e-13
gi 25924589 gb ACU40100.1	3-phosphoshikimate 1-c	(420)	360	84.2	1.6e-13	gi 143892353 gb EDH38461.1	hypothetical protein G	(433)	355	83.1	3.3e-13
gi 140238213 gb ECK46610.1	hypothetical protein G	(219)	356	83.2	1.6e-13	gi 137594212 gb EBU94648.1	hypothetical protein G	(190)	350	81.9	3.3e-13
gi 723939621 gb AAE68239.1	3-phosphoshikimate 1-ca	(428)	360	84.2	1.6e-13	gi 1256796396 gb ACV27052.1	3-phosphoshikimate 1-c	(442)	355	83.1	3.4e-13
gi 140263797 gb ECK64234.1	hypothetical protein G	(134)	353	82.5	1.6e-13	gi 135950277 gb EBK91698.1	hypothetical protein G	(230)	351	82.2	3.4e-13
gi 141051576 gb ECP29931.1	hypothetical protein G	(263)	357	83.5	1.6e-13	gi 140932293 gb EC048252.1	hypothetical protein G	(195)	350	81.9	3.4e-13
gi 138368034 gb EBE219603.1	hypothetical protein G	(266)	357	83.5	1.6e-13	gi 140915160 gb EC036180.1	hypothetical protein G	(142)	348	81.5	3.5e-13
gi 142531301 gb ECY75910.1	hypothetical protein G	(137)	353	82.5	1.6e-13	gi 140442678 gb ECU78355.1	hypothetical protein G	(201)	350	81.9	3.5e-13
gi 139077328 gb EOD25425.1	hypothetical protein G	(226)	356	83.2	1.6e-13	gi 137655461 gb EBV27620.1	hypothetical protein G	(201)	350	81.9	3.5e-13
gi 135111798 gb EBF56743.1	hypothetical protein G	(138)	353	82.5	1.6e-13	gi 139613416 gb ECG27637.1	hypothetical protein G	(211)	350	82.0	3.7e-13
gi 142175064 gb ECW14980.1	hypothetical protein G	(138)	353	82.5	1.6e-13	gi 138983487 gb ECB68508.1	hypothetical protein G	(179)	349	81.7	3.7e-13
gi 143855585 gb EDH11623.1	hypothetical protein G	(118)	352	82.3	1.7e-13	gi 142329282 gb ECX29996.1	hypothetical protein G	(185)	349	81.7	3.8e-13
gi 135240693 gb EBG36992.1	hypothetical protein G	(166)	354	82.7	1.7e-13	gi 140188819 gb ECK12796.1	hypothetical protein G	(191)	349	81.7	3.9e-13
gi 140972874 gb ECO76607.1	hypothetical protein G	(236)	356	83.2	1.7e-13	gi 137854155 gb EBW38038.1	hypothetical protein G	(227)	350	82.0	3.9e-13
gi 139355526 gb ECE60735.1	hypothetical protein G	(205)	355	83.0	1.7e-13	gi 141822648 gb ECT49099.1	hypothetical protein G	(194)	349	81.7	3.9e-13

gi 137525237 gb EBS56150.1	hypothetical protein G (234)	350	82.0	4e-13	gi 143324225 gb EDE33550.1	hypothetical protein G (402)	346	81.3	1.1e-12
gi 137080837 gb EBS09819.1	hypothetical protein G (205)	349	81.7	4.1e-13	gi 134379823 gb EBB01013.1	hypothetical protein G (359)	345	80.0	1.2e-12
gi 143973504 gb EDH96220.1	hypothetical protein G (125)	346	81.0	4.1e-13	gi 198870521 gb AAM01843.1	5-enolpyruvylshikimate- (428)	346	81.3	1.2e-12
gi 135466250 gb EHR82554.1	hypothetical protein G (477)	354	82.9	4.1e-13	gi 197053760 gb ACH25458.1	Sequence 10 from paten (428)	346	81.3	1.2e-12
gi 141447434 gb ECR89501.1	hypothetical protein G (250)	350	82.0	4.2e-13	gi 161726853 emb CAP47297.1	unnamed protein produ (428)	346	81.3	1.2e-12
gi 141931434 gb ECR25456.1	hypothetical protein G (251)	350	82.0	4.2e-13	gi 142160570 gb ECW03887.1	unnamed protein G (512)	347	81.5	1.2e-12
gi 138199572 emb CAE49223.1	3-phosphoshikimate 1-c (431)	353	82.7	4.4e-13	gi 163334427 gb AAAY40476.1	5-enol-pyruvylshikimate (444)	346	81.3	1.2e-12
gi 135841015 gb EBK18020.1	hypothetical protein G (196)	348	81.5	4.6e-13	gi 143017653 gb EDC21271.1	hypothetical protein G (195)	341	80.1	1.2e-12
gi 143412368 gb EDD12423.1	hypothetical protein G (383)	352	82.5	4.6e-13	gi 136363694 gb EBM67128.1	hypothetical protein G (231)	342	80.3	1.2e-12
gi 141547228 gb ECS28434.1	hypothetical protein G (199)	348	81.5	4.6e-13	gi 140120371 gb ECJ67812.1	hypothetical protein G (242)	342	80.3	1.3e-12
gi 136452097 gb EBO25416.1	hypothetical protein G (204)	348	81.5	4.7e-13	gi 139972695 gb ECI73769.1	hypothetical protein G (243)	342	80.3	1.3e-12
gi 139065978 gb ECD17692.1	hypothetical protein G (247)	349	81.8	4.8e-13	gi 137897622 gb EBM62970.1	hypothetical protein G (175)	340	79.8	1.3e-12
gi 146400157 emb CAF23606.1	putative 3-phosphoshik (939)	357	83.7	4.8e-13	gi 134491078 gb EBB66101.1	hypothetical protein G (153)	339	79.6	1.3e-12
gi 141823036 gb ECT49373.1	hypothetical protein G (211)	348	81.1	4.9e-13	gi 142080142 gb ECV42444.1	hypothetical protein G (428)	345	81.1	1.4e-12
gi 141358226 gb ECR26863.1	hypothetical protein G (218)	348	81.5	5e-13	gi 139798315 gb ECH53759.1	hypothetical protein G (310)	343	80.6	1.4e-12
gi 138464932 gb EBK28606.1	hypothetical protein G (165)	346	81.1	5.3e-13	gi 138213505 gb EBY45565.1	hypothetical protein G (190)	340	79.9	1.4e-12
gi 135957341 gb EBK96478.1	hypothetical protein G (180)	346	81.1	5.7e-13	gi 136401218 gb EBN92222.1	hypothetical protein G (98)	336	78.9	1.4e-12
gi 882806321 gb ABC9695.1	3-phosphoshikimate 1-ca (420)	351	82.3	5.7e-13	gi 140119422 gb ECJ67136.1	hypothetical protein G (165)	339	79.6	1.4e-12
gi 135660988 gb EJO55847.1	hypothetical protein G (216)	347	81.3	5.7e-13	gi 138071564 gb EBX58228.1	hypothetical protein G (239)	341	80.1	1.5e-12
gi 118135516 gb ABK62560.1	3-phosphoshikimate 1-c (435)	351	82.3	5.9e-13	gi 135434940 gb EBH61643.1	hypothetical protein G (209)	340	79.9	1.5e-12
gi 135311151 gb EBG78396.1	hypothetical protein G (162)	345	80.9	6e-13	gi 1270512698 gb AC290976.1	3-phosphoshikimate 1-c (425)	344	80.8	1.6e-12
gi 135475974 gb EHR89065.1	hypothetical protein G (242)	347	81.4	6.3e-13	gi 1307102480 emb CAR82020.1	unnamed protein produ (425)	344	80.8	1.6e-12
gi 140555709 gb ECM20146.1	hypothetical protein G (207)	346	81.1	6.4e-13	gi 137102829 gb EB321784.1	hypothetical protein G (112)	336	78.9	1.6e-12
gi 139069875 gb ACE89960.1	3-phosphoshikimate 1-c (420)	350	82.1	6.6e-13	gi 75702201 gb ABA21877.1	3-phosphoshikimate 1-ca (426)	344	80.8	1.6e-12
gi 1218301274 emb CAU98622.1	unnamed protein produ (450)	350	82.1	7e-13	gi 171962661 gb AAZ41017.1	3-phosphoshikimate 1-ca (432)	344	80.8	1.6e-12
gi 139395594 gb ECE82263.1	hypothetical protein G (198)	345	80.9	7.1e-13	gi 139775941 gb ECH37969.1	hypothetical protein G (159)	338	79.4	1.6e-12
gi 136291219 gb EBN17253.1	hypothetical protein G (232)	346	81.2	7.6e-13	gi 136662565 gb EBF58343.1	hypothetical protein G (159)	338	79.4	1.6e-12
gi 135324770 gb EBG7629.1	hypothetical protein G (135)	342	80.2	7.9e-13	gi 15957580 gb AAE08254.1	Sequence 62 from patent (441)	344	80.9	1.6e-12
gi 136446532 gb EBO21828.1	hypothetical protein G (191)	344	80.7	8e-13	gi 144974759 gb ABP12470.1	Sequence 62 from paten (441)	344	80.9	1.6e-12
gi 138997581 gb ECC72330.1	hypothetical protein G (230)	345	80.9	8.1e-13	gi 12485257 gb ABF73393.1	I44482 Sequence 62 from p (441)	344	80.9	1.6e-12
gi 136805392 gb EBQ52456.1	hypothetical protein G (197)	344	80.7	8.2e-13	gi 1581456 emb CAA78480.1	arA [Pasteurella multoc (441)	344	80.9	1.6e-12
gi 135667198 gb EBJ709710.1	hypothetical protein G (238)	345	80.9	8.3e-13	gi 12484180 gb AAB72316.1	I149209 Sequence 62 from p (441)	344	80.9	1.6e-12
gi 137196438 gb EBS74082.1	hypothetical protein G (149)	342	80.2	8.6e-13	gi 136293903 gb EBN19081.1	hypothetical protein G (193)	339	79.7	1.6e-12
gi 137513759 gb EBU50081.1	hypothetical protein G (179)	343	80.5	8.7e-13	gi 138088359 gb EBX67891.1	hypothetical protein G (241)	340	79.9	1.7e-12
gi 136113324 gb EBM00254.1	hypothetical protein G (182)	343	80.5	8.8e-13	gi 135635389 gb EBI89991.1	hypothetical protein G (129)	336	78.9	1.8e-12
gi 139407942 gb ECE90556.1	hypothetical protein G (132)	341	80.0	8.9e-13	gi 137893657 gb EBM60674.1	hypothetical protein G (95)	334	78.5	1.8e-12
gi 143377822 gb EDE65681.1	hypothetical protein G (428)	348	81.7	9e-13	gi 198260919 gb EDX85227.1	3-phosphoshikimate 1-c (446)	343	80.6	1.9e-12
gi 137214083 gb EBS84150.1	hypothetical protein G (222)	344	80.7	9.1e-13	gi 139395595 gb ECR82264.1	hypothetical protein G (230)	339	79.7	1.9e-12
gi 138935690 gb ECC49156.1	hypothetical protein G (162)	342	80.2	9.2e-13	gi 139117329 gb ECJ53219.1	hypothetical protein G (196)	338	79.4	1.9e-12
gi 189428021 gb ACD98169.1	5-enolpyruvylshikimate (445)	348	81.7	9.3e-13	gi 123326204 gb AAN24780.1	3-phosphoshikimate 1-ca (455)	343	80.7	1.9e-12
gi 138501049 gb ECA04254.1	hypothetical protein G (242)	344	80.7	9.8e-13	gi 136951000 gb EBR36509.1	hypothetical protein G (276)	340	79.9	1.9e-12
gi 135569263 gb EBT48826.1	hypothetical protein G (149)	341	80.0	9.9e-13	gi 135035458 gb EBR07996.1	hypothetical protein G (405)	342	80.4	2e-12
gi 141045191 gb ECP25528.1	hypothetical protein G (149)	341	80.0	9.9e-13	gi 1355252927 gb EBI19183.1	hypothetical protein G (129)	335	78.7	2.1e-12
gi 138146322 gb EBY00264.1	hypothetical protein G (150)	341	80.0	9.9e-13	gi 91202313 emb CAJ75373.1	strongly similar to 3- (424)	342	80.4	2.1e-12
gi 138224534 gb EBY53274.1	hypothetical protein G (212)	343	80.5	1e-12	gi 138800588 gb ECR98170.1	hypothetical protein G (156)	336	79.0	2.1e-12
gi 161985195 gb ABX80844.1	3-phosphoshikimate 1-c (418)	347	81.5	1e-12	gi 1237882706 gb EEP71534.1	3-phosphoshikimate 1-c (433)	342	80.4	2.2e-12
gi 221155485 gb ACM04612.1	3-phosphoshikimate 1-c (434)	347	81.5	1e-12	gi 134841298 gb EBD78239.1	hypothetical protein G (225)	339	79.5	2.2e-12
gi 142404151 gb ECX82212.1	hypothetical protein G (228)	343	80.5	1.1e-12	gi 135109078 gb EBF55010.1	hypothetical protein G (452)	342	80.4	2.2e-12
gi 41817616 gb AAS12201.1	3-phosphoshikimate 1-ca (449)	347	81.5	1.1e-12	gi 137475361 gb EBU30443.1	hypothetical protein G (121)	334	78.5	2.3e-12
gi 141709852 gb ECS86876.1	hypothetical protein G (143)	340	79.8	1.1e-12	gi 137271986 gb EBI16720.1	hypothetical protein G (202)	337	79.2	2.3e-12
gi 141398250 gb ECR54896.1	hypothetical protein G (122)	339	79.6	1.1e-12	gi 141879835 gb ECT89188.1	hypothetical protein G (207)	337	79.2	2.3e-12

gi 137527344 gb EBU57324.1	hypothetical protein G	(217)	337	79.3	2.4e-12	gi 135966631 gb EBU02759.1	hypothetical protein G	(214)	331	78.0	5.7e-12
gi 141808595 gb ECT39392.1	hypothetical protein G	(134)	334	78.5	2.5e-12	gi 171341571 dbj BAB76718.1	3-phosphoshikimate 1-c	(425)	335	79.0	5.8e-12
gi 1213504188 emb CAS92805.1	unnamed protein produ	(431)	341	80.2	2.5e-12	gi 1213504190 emb CAS92806.1	unnamed protein produ	(431)	335	79.0	5.9e-12
gi 134362434 gb EBA89872.1	hypothetical protein G	(163)	335	78.8	2.5e-12	gi 1218301288 emb CAU98636.1	unnamed protein produ	(431)	335	79.0	5.9e-12
gi 239515101 gb EEQ54968.1	3-phosphoshikimate 1-c	(445)	341	80.2	2.5e-12	gi 135013362 gb EBU93072.1	hypothetical protein G	(165)	329	77.5	6.1e-12
gi 136288662 gb EBN15525.1	hypothetical protein G	(202)	336	79.0	2.6e-12	gi 139545335 gb ECF78883.1	hypothetical protein G	(141)	328	77.3	6.1e-12
gi 139540931 gb ECF77151.1	hypothetical protein G	(177)	335	78.8	2.7e-12	gi 140194355 gb ECI16491.1	hypothetical protein G	(142)	328	77.3	6.2e-12
gi 137927027 gb EBW77456.1	hypothetical protein G	(150)	334	78.6	2.7e-12	gi 139776743 gb ECI38540.1	hypothetical protein G	(236)	331	78.0	6.2e-12
gi 142504418 gb ECY55742.1	hypothetical protein G	(249)	337	79.3	2.7e-12	gi 141975410 gb ECY55912.1	hypothetical protein G	(107)	326	76.8	6.4e-12
gi 118193930 gb ABR76848.1	5-enolpyruvylshikimate	(414)	340	80.0	2.8e-12	gi 137625100 gb EBV17221.1	hypothetical protein G	(161)	328	77.3	6.9e-12
gi 137873963 gb EBW49399.1	hypothetical protein G	(262)	337	79.3	2.9e-12	gi 140674338 gb ECM73231.1	hypothetical protein G	(236)	330	77.8	7.2e-12
gi 135280343 gb EBG60330.1	hypothetical protein G	(188)	335	78.8	2.9e-12	gi 142981403 gb EDB95732.1	hypothetical protein G	(122)	326	76.9	7.2e-12
gi 136799237 gb EQB48383.1	hypothetical protein G	(263)	337	79.3	2.9e-12	gi 142806346 gb EDA77221.1	hypothetical protein G	(240)	330	77.8	7.3e-12
gi 137961021 gb EBW98740.1	hypothetical protein G	(230)	336	79.1	3e-12	gi 137601619 gb EBU98761.1	hypothetical protein G	(146)	327	77.1	7.3e-12
gi 143735046 gb EDG51254.1	hypothetical protein G	(237)	336	79.1	3e-12	gi 142914613 gb EDB48485.1	hypothetical protein G	(106)	325	76.6	7.4e-12
gi 140469806 gb ECL93098.1	hypothetical protein G	(240)	336	79.1	3.1e-12	gi 136051934 gb EBI58617.1	hypothetical protein G	(207)	329	77.6	7.4e-12
gi 142007150 gb ECU78011.1	hypothetical protein G	(248)	336	79.1	3.2e-12	gi 140878389 gb ECOI2061.1	hypothetical protein G	(211)	329	77.6	7.5e-12
gi 145017901 gb EDK02180.1	hypothetical protein M	(1575)	347	81.7	3.2e-12	gi 134820000 gb EBG64619.1	hypothetical protein G	(130)	326	76.9	7.6e-12
gi 142026872 gb ECU97300.1	hypothetical protein G	(420)	339	79.8	3.2e-12	gi 1269786272 gb ACZ38415.1	3-phosphoshikimate 1-c	(435)	333	78.6	7.9e-12
gi 137268762 gb EBT14925.1	hypothetical protein G	(187)	334	78.6	3.3e-12	gi 51856246 dbj BA040404.1	3-phosphoshikimate-1-c	(449)	333	78.6	8.1e-12
gi 136645114 gb EBP47908.1	hypothetical protein G	(132)	331	77.9	3.8e-12	gi 137698489 gb EBV52072.1	hypothetical protein G	(151)	326	76.9	8.7e-12
gi 14058228 gb ECN31786.1	hypothetical protein G	(220)	334	78.6	3.8e-12	gi 139913576 gb ECI32833.1	hypothetical protein G	(214)	328	77.4	8.8e-12
gi 68264311 emb CAT37799.1	3-phosphoshikimate 1-c	(429)	338	79.6	3.8e-12	gi 140309628 gb ECK88544.1	hypothetical protein G	(98)	323	76.2	9.2e-12
gi 135852837 gb EBK25457.1	hypothetical protein G	(226)	334	78.6	3.9e-12	gi 143904377 gb EDB46982.1	hypothetical protein G	(343)	330	77.9	9.9e-12
gi 1237020450 gb EBR75785.1	hypothetical protein G	(120)	330	77.7	4e-12	gi 140182762 gb ECK08451.1	hypothetical protein G	(184)	326	76.9	1e-11
gi 131524060 gb ACU52807.1	3-phosphoshikimate 1-c	(461)	338	79.6	4e-12	gi 1359453313 gb EBR87033.1	hypothetical protein G	(190)	326	76.9	1.1e-11
gi 137606007 gb EBV01255.1	hypothetical protein G	(208)	333	78.4	4.2e-12	gi 141954027 gb ECU41298.1	hypothetical protein G	(225)	327	77.2	1.1e-11
gi 134412896 gb EBB20265.1	hypothetical protein G	(152)	331	77.9	4.2e-12	gi 137887915 gb EBW57387.1	hypothetical protein G	(168)	325	76.7	1.1e-11
gi 139752541 gb ECH21814.1	hypothetical protein G	(182)	332	78.2	4.3e-12	gi 134700209 gb EBG90411.1	hypothetical protein G	(169)	325	76.7	1.1e-11
gi 137113514 gb EBS27820.1	hypothetical protein G	(301)	335	78.9	4.3e-12	gi 134380743 gb EBB02262.1	hypothetical protein G	(200)	326	77.0	1.1e-11
gi 140677436 gb ECM73229.1	hypothetical protein G	(220)	333	78.4	4.4e-12	gi 136357207 gb EBN61951.1	hypothetical protein G	(204)	326	77.0	1.1e-11
gi 138956670 gb ECC58151.1	hypothetical protein G	(134)	330	77.7	4.4e-12	gi 138839332 gb ECC10256.1	hypothetical protein G	(155)	324	76.5	1.2e-11
gi 6855375 emb CAB71266.1	3-phosphoshikimate 1-ca	(440)	337	79.4	4.5e-12	gi 138510310 gb ECA09339.1	hypothetical protein G	(160)	324	76.5	1.2e-11
gi 197697271 gb EDY44204.1	3-phosphoshikimate 1-c	(443)	337	79.4	4.5e-12	gi 138006824 gb EBX24048.1	hypothetical protein G	(164)	324	76.5	1.2e-11
gi 1269305959 gb ACZ31509.1	3-phosphoshikimate 1-c	(444)	337	79.4	4.5e-12	gi 142858079 gb EDB07673.1	hypothetical protein G	(141)	323	76.3	1.3e-11
gi 134510774 gb EBB77501.1	hypothetical protein G	(120)	329	77.5	4.6e-12	gi 138288445 gb EBY80872.1	hypothetical protein G	(143)	323	76.3	1.3e-11
gi 139693641 gb ECG83504.1	hypothetical protein G	(235)	333	78.4	4.6e-12	gi 141666967 gb ECS70781.1	hypothetical protein G	(238)	326	77.0	1.3e-11
gi 138908492 gb ECC37782.1	hypothetical protein G	(123)	329	77.5	4.7e-12	gi 167288349 gb ABZ41213.1	Sequence 15151 from pa	(400)	329	77.7	1.3e-11
gi 143051684 gb EDC46069.1	hypothetical protein G	(151)	330	77.7	4.9e-12	gi 167287866 gb ABZ40730.1	Sequence 14668 from pa	(410)	329	77.7	1.3e-11
gi 136377067 gb EBN75527.1	hypothetical protein G	(152)	330	77.7	4.9e-12	gi 167287577 gb ABZ40441.1	Sequence 14379 from pa	(410)	329	77.7	1.3e-11
gi 140538314 gb ECM15202.1	hypothetical protein G	(153)	330	77.7	4.9e-12	gi 167284960 gb ABZ37824.1	Sequence 11762 from pa	(410)	329	77.7	1.3e-11
gi 142221795 gb ECW50550.1	hypothetical protein G	(356)	335	78.9	5e-12	gi 141201113 gb ECOC31813.1	hypothetical protein G	(184)	324	76.5	1.4e-11
gi 136108377 gb EBI96850.1	hypothetical protein G	(216)	332	78.2	5e-12	gi 15155591 gb AAK86449.1	3-phosphoshikimate 1-ca	(425)	329	77.7	1.4e-11
gi 137249529 gb EBT04003.1	hypothetical protein G	(132)	329	77.5	5e-12	gi 1209409579 emb CAR82016.1	unnamed protein produ	(425)	329	77.7	1.4e-11
gi 142176534 gb ECW16103.1	hypothetical protein G	(441)	336	79.2	5.2e-12	gi 136532719 gb EB077403.1	hypothetical protein G	(375)	328	77.5	1.4e-11
gi 139957029 gb ECI62786.1	hypothetical protein G	(165)	330	77.7	5.3e-12	gi 1237878972 gb ACR31304.1	5-enolpyruvylshikimate	(451)	329	77.7	1.4e-11
gi 141561787 gb ECS38611.1	hypothetical protein G	(196)	331	78.0	5.3e-12	gi 139751825 gb ECH21337.1	hypothetical protein G	(201)	324	76.5	1.5e-11
gi 141357056 gb ECR26055.1	hypothetical protein G	(198)	331	78.0	5.3e-12	gi 134549606 gb EBG00642.1	hypothetical protein G	(111)	320	75.6	1.6e-11
gi 138599473 gb ECA71366.1	hypothetical protein G	(200)	331	78.0	5.4e-12	gi 135506999 gb EBI08954.1	hypothetical protein G	(220)	324	76.6	1.6e-11
gi 138685422 gb ECB29911.1	hypothetical protein G	(288)	333	78.5	5.5e-12	gi 139137061 gb ECP65571.1	hypothetical protein G	(114)	320	75.6	1.6e-11
gi 143120591 gb EDC96442.1	hypothetical protein G	(210)	331	78.0	5.6e-12	gi 108768752 gb ABG07474.1	3-phosphoshikimate 1-c	(438)	328	77.5	1.6e-11

gi 119693519 gb ABL90592.1 3-phosphoshikimate 1-c (438)	328 77.5 1.6e-11	gi 140922142 gb EC040954.1	hypothetical protein G (127)	315 74.6 3.6e-11
gi 137007196 gb EBR68377.1 hypothetical protein G (98)	319 75.4 1.6e-11	gi 139300510 gb EC484466.1	hypothetical protein G (180)	317 75.1 3.7e-11
gi 142196767 gb ECW31538.1 hypothetical protein G (325)	326 77.1 1.7e-11	gi 1239679351 gb AC507601.1	Sequence 23 from paten (419)	322 76.3 3.7e-11
gi 135220202 gb EBG24982.1 hypothetical protein G (234)	324 76.6 1.7e-11	gi 117576145 emb CAL68907.1	unnamed protein produ (419)	322 76.3 3.7e-11
gi 137815339 gb EBW15583.1 hypothetical protein G (172)	322 76.1 1.7e-11	gi 1226911720 gb EEH96921.1	3-phosphoshikimate 1-c (431)	322 76.3 3.8e-11
gi 117576131 emb CAL68900.1 unnamed protein produ (419)	327 77.3 1.8e-11	gi 1139125726 gb EC058837.1	hypothetical protein G (114)	314 74.4 3.8e-11
gi 1239679344 gb AC507594.1	Sequence 9 from patent (419)	gi 141531454 gb EC517387.1	hypothetical protein G (162)	316 74.8 3.9e-11
gi 194220102 gb ABF14261.1 3-phosphoshikimate 1-ca (428)	327 77.3 1.8e-11	gi 1218301271 emb CAU98620.1	unnamed protein produ (442)	322 76.3 3.9e-11
gi 144123245 gb EDU03229.1 hypothetical protein G (438)	327 77.3 1.9e-11	gi 127361607 gb AAO10514.1	IAE016804_24 3-phosphosh (376)	321 76.0 3.9e-11
gi 137439907 gb EBU11139.1 hypothetical protein G (139)	320 75.6 1.9e-11	gi 1126219902 gb ABN83408.1	5-enolpyruvylshikimate (448)	322 76.3 3.9e-11
gi 135301369 gb EBG72638.1 hypothetical protein G (142)	320 75.6 2e-11	gi 1139512332 gb ECF57947.1	hypothetical protein G (122)	314 74.4 4.1e-11
gi 134789146 gb EBD44416.1 hypothetical protein G (147)	320 75.6 2e-11	gi 141358068 gb ECR26755.1	hypothetical protein G (172)	316 74.8 4.1e-11
gi 141436523 gb ECR81656.1 hypothetical protein G (179)	321 75.9 2.1e-11	gi 141571591 gb EC542100.1	hypothetical protein G (124)	314 74.4 4.1e-11
gi 138189835 gb EBX30590.1 hypothetical protein G (213)	322 76.1 2.1e-11	gi 1138538608 gb ECR28773.1	hypothetical protein G (174)	316 74.9 4.1e-11
gi 135798487 gb EBU91258.1 hypothetical protein G (132)	319 75.4 2.1e-11	gi 1139459143 gb ECR24709.1	hypothetical protein G (179)	316 74.9 4.2e-11
gi 139445388 gb ECF14877.1 hypothetical protein G (219)	322 76.1 2.1e-11	gi 1154698953 gb EDN89691.1	hypothetical protein s (1576)	329 78.0 4.3e-11
gi 126233798 gb ABN97198.1 3-phosphoshikimate 1-c (438)	326 77.1 2.2e-11	gi 117576137 emb CAL68903.1	unnamed protein produ (419)	321 76.1 4.3e-11
gi 140647368 gb ECM54294.1 hypothetical protein G (191)	321 75.9 2.2e-11	gi 1239679350 gb AC507600.1	Sequence 21 from paten (419)	321 76.1 4.3e-11
gi 134267680 gb EBY68978.1 hypothetical protein G (130)	318 75.2 2.4e-11	gi 117576143 emb CAL68906.1	unnamed protein produ (419)	321 76.1 4.3e-11
gi 53854589 gb AAU95677.1 arom [Sclerotinia scler (1590)	333 78.8 2.4e-11	gi 143683392 gb ED25520.1	hypothetical protein G (155)	315 74.6 4.3e-11
gi 218086784 emb CAT03395.1 unnamed protein produ (419)	325 76.9 2.4e-11	gi 1134974650 gb EB566821.1	hypothetical protein G (198)	316 74.9 4.6e-11
gi 141784517 gb ECR27521.1 hypothetical protein G (218)	321 75.9 2.4e-11	gi 140242114 gb ECK49397.1	hypothetical protein G (201)	316 74.9 4.7e-11
gi 137551557 gb EBU70622.1 hypothetical protein G (135)	318 75.2 2.5e-11	gi 143612207 gb EDR86144.1	hypothetical protein G (334)	319 75.6 4.7e-11
gi 137434272 gb EBU07011.1 hypothetical protein G (231)	320 75.7 2.6e-11	gi 1137082794 gb EBX010909.1	hypothetical protein G (242)	317 75.1 4.8e-11
gi 117561405 gb ABK38353.1 3-phosphoshikimate 1-c (455)	325 76.9 2.6e-11	gi 182634487 gb ACB95261.1	3-phosphoshikimate 1-c (424)	320 75.9 5e-11
gi 134678975 gb ECF77637.1 hypothetical protein G (200)	320 75.7 2.6e-11	gi 1138033807 gb EBX38001.1	hypothetical protein G (97)	311 73.7 5.1e-11
gi 135767474 gb EBY71737.1 hypothetical protein G (237)	321 76.0 2.6e-11	gi 141796891 gb ECH33585.1	hypothetical protein G (161)	314 74.4 5.2e-11
gi 140279343 gb ECK71234.1 hypothetical protein G (145)	318 75.2 2.7e-11	gi 1139753549 gb ECH22504.1	hypothetical protein G (227)	316 74.9 5.2e-11
gi 136051935 gb EBU58618.1 hypothetical protein G (206)	320 75.7 2.7e-11	gi 1138575184 gb EC545711.1	hypothetical protein G (193)	315 74.7 5.2e-11
gi 135848766 gb EBR22892.1 hypothetical protein G (148)	318 75.2 2.7e-11	gi 1136047742 gb EBU55766.1	hypothetical protein G (199)	315 74.7 5.4e-11
gi 143489039 gb EDF26103.1 hypothetical protein G (153)	318 75.2 2.8e-11	gi 143086208 gb EDC71322.1	hypothetical protein G (200)	315 74.7 5.4e-11
gi 137181349 gb EB566811.1 hypothetical protein G (140)	317 75.0 3e-11	gi 1136310120 gb EBN30164.1	hypothetical protein G (390)	319 75.6 5.4e-11
gi 140945347 gb ECO57367.1 hypothetical protein G (138)	319 75.5 3e-11	gi 1229383027 gb EEC331168.1	3-phosphoshikimate 1-c (426)	319 75.7 5.8e-11
gi 135582507 gb EBI57266.1 hypothetical protein G (202)	319 75.5 3.1e-11	gi 1136446530 gb EB021826.1	hypothetical protein G (187)	314 74.4 5.9e-11
gi 1213504180 emb CAS92801.1 unnamed protein produ (467)	324 76.7 3.1e-11	gi 1157918462 gb ABV99889.1	3-phosphoshikimate 1-c (433)	319 75.7 5.9e-11
gi 76782132 gb ABA54838.1 3-phosphoshikimate 1-ca (403)	323 76.5 3.1e-11	gi 1137251448 gb EBT05121.1	hypothetical protein G (198)	314 74.5 6.2e-11
gi 144197942 gb EDJ58366.1 hypothetical protein G (482)	324 76.7 3.2e-11	gi 140795564 gb ECH56607.1	hypothetical protein G (216)	314 74.5 6.7e-11
gi 126490641 gb AAB89746.1 5-enolpyruvylshikimate 3 (416)	323 76.5 3.2e-11	gi 1268312873 gb ACY99247.1	3-phosphoshikimate 1-c (425)	318 75.4 6.7e-11
gi 1197053754 gb ACH25452.1	Sequence 4 from patent (416)	gi 141070657 gb ECP42029.1	hypothetical protein G (157)	312 74.0 6.7e-11
gi 167294559 gb ABZ47423.1	Sequence 21361 from pa (416)	gi 135696052 gb EBJ27471.1	hypothetical protein G (190)	313 74.2 6.9e-11
gi 1239679345 gb ACS07595.1	Sequence 11 from paten (419)	gi 134843697 gb EBD79778.1	hypothetical protein G (122)	310 73.5 7.2e-11
gi 117576125 emb CAL68897.1 unnamed protein produ (419)	323 76.5 3.2e-11	gi 143157320 gb EDD231165.1	hypothetical protein G (205)	313 74.3 7.4e-11
gi 117576123 emb CAL68666.1 unnamed protein produ (419)	323 76.5 3.2e-11	gi 139909706 gb EC130075.1	hypothetical protein G (205)	313 74.3 7.4e-11
gi 1239679341 gb ACS07591.1	Sequence 3 from patent (419)	gi 117576135 emb CAL68902.1	unnamed protein produ (419)	317 75.2 7.7e-11
gi 209571207 emb CAR82018.1 unnamed protein produ (419)	323 76.5 3.2e-11	gi 1239679346 gb ACS07596.1	Sequence 13 from paten (419)	317 75.2 7.7e-11
gi 239679343 gb ACS07593.1	Sequence 7 from patent (419)	gi 158510786 gb ABW67753.1	3-phosphoshikimate 1-c (423)	317 75.2 7.7e-11
gi 117576129 emb CAL68899.1 unnamed protein produ (419)	323 76.5 3.2e-11	gi 137183088 gb EB566775.1	hypothetical protein G (187)	312 74.0 7.8e-11
gi 134740074 gb EBD13133.1 hypothetical protein G (240)	319 75.5 3.5e-11	gi 1257050668 gb ACV39852.1	3-phosphoshikimate 1-c (431)	317 75.2 7.8e-11
gi 140050235 gb ECJ24330.1 hypothetical protein G (107)	314 74.3 3.6e-11	gi 139308929 gb ECE49564.1	hypothetical protein G (120)	309 73.3 8.2e-11

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gi 135933566 gb EBK80451.1	hypothetical protein G	(168)	311	73.8	8.3e-11	gi 139731566 gb ECH08565.1	hypothetical protein G	(180)	306	72.8	1.8e-10
gi 143344597 gb EDE46223.1	hypothetical protein G	(328)	315	74.8	8.3e-11	gi 140064590 gb ECU31471.1	hypothetical protein G	(184)	306	72.8	1.8e-10
gi 135162902 gb EFB89584.1	hypothetical protein G	(124)	309	73.3	8.5e-11	gi 134392972 gb EBB09817.1	hypothetical protein G	(185)	306	72.8	1.8e-10
gi 135111849 gb EFB56773.1	hypothetical protein G	(294)	314	74.5	8.7e-11	gi 138081070 gb EBX63704.1	hypothetical protein G	(235)	307	73.0	2e-10
gi 160339357 gb ABX12444.1	3-phosphoshikimate 1-c	(422)	316	75.5	8.9e-11	gi 1207102476 emb CAR82015.1	unnamed protein produ	(418)	310	73.8	2.1e-10
gi 142836951 gb EDA95298.1	hypothetical protein G	(184)	311	73.8	8.9e-11	gi 1288514951 gb AAO54572.1	3-phosphoshikimate 1-ca	(418)	310	73.8	2.1e-10
gi 138324259 gb EBU97937.1	hypothetical protein G	(218)	312	74.1	9e-11	gi 117648206 gb ABX52308.1	3-phosphoshikimate 1-c	(423)	310	73.8	2.1e-10
gi 137533283 gb EBU60530.1	hypothetical protein G	(162)	310	73.6	9.2e-11	gi 142545689 gb ECY85744.1	hypothetical protein G	(188)	305	72.6	2.2e-10
gi 145689056 gb ABP89362.1	5-enolpyruvylshikimate	(101)	307	72.9	9.5e-11	gi 137813443 gb EBW14469.1	hypothetical protein G	(191)	305	72.6	2.2e-10
gi 140569505 gb ECM62959.1	hypothetical protein G	(124)	308	73.1	9.8e-11	gi 137272029 gb EBT16745.1	hypothetical protein G	(162)	304	72.3	2.2e-10
gi 141116592 gb ECP74054.1	hypothetical protein G	(147)	309	73.4	9.8e-11	gi 134457901 gb EBB46412.1	hypothetical protein G	(201)	305	72.6	2.3e-10
gi 137996781 gb EBX18771.1	hypothetical protein G	(210)	311	73.8	1e-10	gi 1218301285 emb CAU98633.1	unnamed protein produ	(412)	309	73.6	2.4e-10
gi 134917544 gb EBE28661.1	hypothetical protein G	(180)	310	73.6	1e-10	gi 1207102482 emb CAR82021.1	unnamed protein produ	(418)	309	73.6	2.4e-10
gi 117576133 emb CAL68901.1	unnamed protein produ	(419)	315	74.8	1e-10	gi 1632548501 gb AAY35946.1	3-phosphoshikimate 1-ca	(418)	309	73.6	2.4e-10
gi 135491966 gb EBH99301.1	hypothetical protein G	(112)	307	72.9	1e-10	gi 1221722512 gb ACM25668.1	3-phosphoshikimate 1-c	(418)	309	73.6	2.4e-10
gi 1259027640 gb ACV91084.1	5-enolpyruvylshikimate	(427)	315	74.8	1e-10	gi 1207102488 emb CAR82024.1	unnamed protein produ	(418)	309	73.6	2.4e-10
gi 121052443 emb CAM08779.1	5-enolpyruvylshikima	(433)	315	74.8	1.1e-10	gi 1226184786 dbj BAH32890.1	3-phosphoshikimate 1-	(437)	309	73.6	2.5e-10
gi 140082999 gb ECU42830.1	hypothetical protein G	(191)	310	73.6	1.1e-10	gi 142078992 gb ECV41483.1	hypothetical protein G	(439)	309	73.6	2.5e-10
gi 133594207 gb EBT64500.1	hypothetical protein G	(99)	306	72.7	1.1e-10	gi 138151161 gb EBY03576.1	hypothetical protein G	(118)	301	71.7	2.6e-10
gi 143355421 gb EDE52319.1	hypothetical protein G	(448)	315	74.8	1.1e-10	gi 143081824 gb EDC68127.1	hypothetical protein G	(196)	304	72.4	2.6e-10
gi 184212201 gb EDU09244.1	putative 3-phosphoshik	(448)	315	74.8	1.1e-10	gi 139814833 gb ECH65564.1	hypothetical protein G	(196)	304	72.4	2.6e-10
gi 137658590 gb EBE29424.1	hypothetical protein G	(101)	306	72.7	1.1e-10	gi 137819489 gb EBW18017.1	hypothetical protein G	(170)	303	72.1	2.6e-10
gi 143437003 gb EDE94972.1	hypothetical protein G	(635)	317	75.3	1.1e-10	gi 140182535 gb ECK08289.1	hypothetical protein G	(148)	302	71.9	2.7e-10
gi 141725760 gb ECS96726.1	hypothetical protein G	(144)	308	73.2	1.1e-10	gi 138014336 gb EBX28033.1	hypothetical protein G	(294)	306	72.9	2.8e-10
gi 134753000 gb EBD20520.1	hypothetical protein G	(180)	309	73.4	1.2e-10	gi 117576139 emb CAL68904.1	unnamed protein produ	(419)	308	73.4	2.8e-10
gi 1239679342 gb ACS07592.1	Sequence 5 from patent	(419)	314	74.6	1.2e-10	gi 1239679348 gb ACS07599.1	Sequence 17 from paten	(419)	308	73.4	2.8e-10
gi 117576141 emb CAL68905.1	unnamed protein produ	(419)	314	74.6	1.2e-10	gi 136360811 gb EBN64427.1	hypothetical protein G	(131)	301	71.7	2.8e-10
gi 117576127 emb CAL68898.1	unnamed protein produ	(419)	314	74.6	1.2e-10	gi 1229362102 emb CAY49004.1	putative 3-phosphosh	(425)	308	73.4	2.8e-10
gi 1239679349 gb ACS07599.1	Sequence 19 from paten	(419)	314	74.6	1.2e-10	gi 186464230 gb ACC80031.1	3-phosphoshikimate 1-c	(426)	308	73.4	2.8e-10
gi 141920457 gb ECU17551.1	hypothetical protein G	(221)	310	73.7	1.2e-10	gi 118765287 dbj BAF39466.1	3-phosphoshikimate 1-	(450)	308	73.4	3e-10
gi 261392307 emb CAX49833.1	3-phosphoshikimate 1-	(433)	314	74.6	1.2e-10	gi 138697010 gb ECB38164.1	hypothetical protein G	(208)	303	72.2	3.1e-10
gi 138733009 gb ECB63288.1	hypothetical protein G	(135)	307	72.9	1.2e-10	gi 1209571213 emb CAR82026.1	unnamed protein produ	(412)	307	73.1	3.2e-10
gi 141515914 gb ECS12618.1	hypothetical protein G	(194)	309	73.4	1.2e-10	gi 1209571209 emb CAR82019.1	unnamed protein produ	(412)	307	73.1	3.2e-10
gi 135882330 gb EBX45024.1	hypothetical protein G	(201)	309	73.4	1.3e-10	gi 169157002 emb CAQ02172.1	3-phosphoshikimate 1-	(487)	308	73.4	3.2e-10
gi 169653664 gb EDS86357.1	putative 3-phosphoshik	(469)	314	74.6	1.3e-10	gi 134676963 gb EBG76457.1	hypothetical protein G	(179)	302	71.9	3.2e-10
gi 143243535 gb EDD84840.1	hypothetical protein G	(177)	308	73.2	1.3e-10	gi 1209571211 emb CAR82025.1	unnamed protein produ	(444)	307	73.2	3.4e-10
gi 138052107 gb EBX47852.1	hypothetical protein G	(130)	306	72.7	1.4e-10	gi 135603657 gb EBI70337.1	hypothetical protein G	(197)	302	72.0	3.5e-10
gi 137453946 gb EBU19127.1	hypothetical protein G	(182)	308	73.2	1.4e-10	gi 143277548 gb EDE08112.1	hypothetical protein G	(149)	300	71.5	3.6e-10
gi 141182843 gb ECQ20365.1	hypothetical protein G	(134)	306	72.7	1.4e-10	gi 136066746 gb EBU68557.1	hypothetical protein G	(177)	301	71.7	3.6e-10
gi 109626980 emb CAJ53455.1	3-phosphoshikimate 1-	(432)	313	74.4	1.4e-10	gi 1141993398 gb ECU68756.1	hypothetical protein G	(153)	301	71.7	3.7e-10
gi 138717870 gb ECB52618.1	hypothetical protein G	(311)	311	73.9	1.4e-10	gi 135811094 gb EBU99204.1	hypothetical protein G	(178)	300	71.5	3.7e-10
gi 150951940 gb AAT89641.1	3-phosphoshikimate 1-ca	(436)	313	74.4	1.4e-10	gi 136291221 gb EBN17255.1	hypothetical protein G	(181)	301	71.7	3.7e-10
gi 140269326 gb ECK68180.1	hypothetical protein G	(123)	305	72.5	1.5e-10	gi 144119343 gb EDU00333.1	hypothetical protein G	(133)	299	71.3	3.8e-10
gi 161595853 gb EBY73313.1	5-enolpyruvylshikimat	(399)	312	74.2	1.5e-10	gi 1226512689 gb EEH62034.1	3-phosphoshikimate 1-c	(433)	309	73.0	3.8e-10
gi 17456208 gb AAZ35419.1	3-phosphoshikimate 1-ca	(418)	312	74.2	1.6e-10	gi 268624509 gb EEZ56909.1	3-phosphoshikimate 1-c	(433)	306	73.0	3.8e-10
gi 1207102484 emb CAR82022.1	unnamed protein produ	(418)	312	74.2	1.6e-10	gi 1256559915 gb ACU85762.1	3-phosphoshikimate 1-c	(441)	306	73.0	3.9e-10
gi 137751638 gb EBY80445.1	hypothetical protein G	(131)	305	72.5	1.6e-10	gi 138737167 gb ECB66241.1	hypothetical protein G	(206)	301	71.8	4.2e-10
gi 137485375 gb EBU35622.1	hypothetical protein G	(102)	303	72.0	1.7e-10	gi 134471594 gb EBB54403.1	hypothetical protein G	(209)	301	71.8	4.2e-10
gi 136050609 gb EBL57707.1	hypothetical protein G	(389)	311	74.0	1.7e-10	gi 167293329 gb ABZ46193.1	Sequence 20131 from pa	(411)	305	72.7	4.2e-10
gi 1402266100 gb ECS38548.1	hypothetical protein G	(236)	308	73.2	1.7e-10	gi 139521188 gb ECF64171.1	hypothetical protein G	(155)	299	71.3	4.3e-10
gi 134385480 gb EBB05348.1	hypothetical protein G	(107)	303	72.1	1.8e-10	gi 268550754 gb EEZ45773.1	3-phosphoshikimate 1-c	(433)	305	72.7	4.4e-10

gi 7226672 gb AAFA1793.1 3-phosphoshikimate 1-car	(433)	305	72.7	4.4e-10	gi 141778677 gb ECT24444.1	hypothetical protein G	(147)	291	69.6	1.3e-09
gi 268622298 gb EEZ54698.1 3-phosphoshikimate 1-c	(433)	305	72.7	4.4e-10	gi 147830428 emb CAN01363.1 3-phosphoshikimate 1-	(487)	298	71.3	1.3e-09	
gi 268585344 gb EEZ50020.1 3-phosphoshikimate 1-c	(433)	305	72.7	4.4e-10	gi 141399981 gb ECR56140.1	hypothetical protein G	(182)	292	69.9	1.4e-09
gi 268587665 gb EEZ52341.1 3-phosphoshikimate 1-c	(433)	305	72.7	4.4e-10	gi 137016683 gb EBR73704.1	hypothetical protein G	(99)	288	68.9	1.4e-09
gi 268548093 gb EEZ43511.1 3-phosphoshikimate 1-c	(433)	305	72.7	4.4e-10	gi 140604009 gb ECU40377.1	hypothetical protein G	(194)	292	69.9	1.4e-09
gi 136405337 gb EBR95052.1	(97)	296	70.6	4.5e-10	gi 141952739 gb ECU35571.1	hypothetical protein G	(171)	291	69.7	1.5e-09
gi 141594961 gb ECS0891.1	(194)	300	71.5	4.6e-10	gi 138587156 gb ECR2809.1	hypothetical protein G	(181)	291	69.7	1.6e-09
gi 138262361 gb EBR65197.1	(166)	299	71.3	4.6e-10	gi 115699210 gb ABK18398.1	3-phosphoshikimate 1-c	(423)	296	70.9	1.6e-09
gi 137396650 gb EBR78670.1	(129)	297	70.8	4.9e-10	gi 156179475 gb AAV82197.1 5-enolpyruvylshikimate-	(429)	296	70.9	1.6e-09	
gi 135849858 gb EBK23583.1	(95)	295	70.4	5.1e-10	gi 120866826 emb CAM10584.1 5-enolpyruvylshikima	(433)	296	70.9	1.6e-09	
gi 151359694 gb ABS02697.1 3-phosphoshikimate 1-c	(449)	304	72.5	5.3e-10	gi 193933758 gb ACF29582.1 3-phosphoshikimate 1-c	(433)	296	70.9	1.6e-09	
gi 139642795 gb ECG46466.1	(199)	299	71.3	5.4e-10	gi 159718193 gb AAW9598.1 putative 5-enolpyruvyl	(433)	296	70.9	1.6e-09	
gi 138011315 gb EBR26442.1	(174)	298	71.1	5.5e-10	gi 136634439 gb EBP41578.1	hypothetical protein G	(136)	289	69.2	1.6e-09
gi 135680289 gb EBJ17747.1	(126)	296	70.6	5.6e-10	gi 139832401 gb ECH77500.1	hypothetical protein G	(289)	293	70.2	1.8e-09
gi 135898933 gb EBK56669.1	(181)	298	71.1	5.7e-10	gi 139968913 gb ECI77100.1	hypothetical protein G	(132)	288	69.0	1.8e-09
gi 136430441 gb EB011415.1	(256)	300	71.6	5.8e-10	gi 137394998 gb EBT85728.1	hypothetical protein G	(159)	289	69.2	1.9e-09
gi 247545418 gb ACT02437.1	(430)	303	72.3	5.9e-10	gi 141325309 gb ECR05885.1	hypothetical protein G	(97)	286	68.5	1.9e-09
gi 254672959 emb CBA07392.1 3-phosphoshikimate 1-	(433)	303	72.3	5.9e-10	gi 135833976 gb EBK13589.1	hypothetical protein G	(143)	288	69.0	2e-09
gi 254668754 emb CBA06624.1 3-phosphoshikimate 1-	(433)	303	72.3	5.9e-10	gi 141393186 gb ECR51348.1	hypothetical protein G	(103)	286	68.5	2e-09
gi 137446725 gb EBU15001.1	(115)	295	70.4	6e-10	gi 142712954 gb EDA03778.1	hypothetical protein G	(170)	289	69.2	2e-09
gi 207102486 emb CAR82023.1	(444)	303	72.3	6.1e-10	gi 139552759 gb ECR85571.1	hypothetical protein G	(178)	289	69.2	2.1e-09
gi 12400573 gb ABM21481.1 5'-enolpyruvylshikimat	(444)	303	72.3	6.1e-10	gi 141711640 gb ECS87995.1	hypothetical protein G	(184)	289	69.2	2.1e-09
gi 157272154 gb ABV26712.1	(444)	303	72.3	6.1e-10	gi 136634441 gb EBP41580.1	hypothetical protein G	(132)	287	68.8	2.1e-09
gi 141787258 gb ECT28985.1	(140)	296	70.7	6.1e-10	gi 142319596 gb ECX22834.1	hypothetical protein G	(133)	287	68.8	2.1e-09
gi 138502658 gb ECA05423.1	(152)	296	70.7	6.6e-10	gi 161161889 emb CAN93194.1 3-phosphoshikimate 1-	(428)	294	70.5	2.1e-09	
gi 26858296 gb EEZ47662.1	(433)	302	72.1	6.8e-10	gi 134397597 gb EBB11730.1	hypothetical protein G	(186)	289	69.3	2.1e-09
gi 268626765 gb EEZ59165.1 3-phosphoshikimate 1-c	(433)	302	72.1	6.8e-10	gi 135714631 gb EBU338978.1	hypothetical protein G	(115)	286	68.5	2.2e-09
gi 134977338 gb EBE68641.1	(114)	294	70.2	6.8e-10	gi 139936889 gb ECI49196.1	hypothetical protein G	(192)	289	69.3	2.2e-09
gi 134136777 gb ABO57891.1	(460)	302	72.1	7.2e-10	gi 136580598 gb EBP07978.1	hypothetical protein G	(329)	292	70.0	2.3e-09
gi 134357023 gb EBR86222.1	(126)	294	70.2	7.5e-10	gi 138381148 gb EBR227658.1	hypothetical protein G	(103)	285	68.3	2.3e-09
gi 197710309 gb EDY54343.1 3-phosphoshikimate 1-c	(415)	301	71.9	7.6e-10	gi 136931619 gb EBR25604.1	hypothetical protein G	(203)	289	69.3	2.3e-09
gi 143023313 gb EDC25299.1	(131)	294	70.2	7.7e-10	gi 140795452 gb ECN56325.1	hypothetical protein G	(172)	288	69.0	2.3e-09
gi 142130241 gb ECV81111.1	(133)	294	70.2	7.8e-10	gi 142053474 gb ECV20051.1	hypothetical protein G	(362)	292	70.0	2.5e-09
gi 1254670251 emb CBA05487.1 3-phosphoshikimate 1-	(433)	301	71.9	7.9e-10	gi 137380099 gb EBT77156.1	hypothetical protein G	(246)	289	69.3	2.7e-09
gi 139859200 gb ECH96267.1	(195)	296	70.7	8.2e-10	gi 141038491 gb ECR20912.1	hypothetical protein G	(180)	287	68.8	2.8e-09
gi 139968357 gb ECI70702.1	(201)	296	70.7	8.4e-10	gi 136715732 gb EBP93040.1	hypothetical protein G	(417)	292	70.0	2.8e-09
gi 116256981 gb ABU90863.1 3-phosphoshikimate 1-c	(435)	300	71.7	9.2e-10	gi 141831272 gb ECT55097.1	hypothetical protein G	(190)	287	68.8	2.9e-09
gi 142419593 gb ECX93837.1	(420)	299	71.5	1e-09	gi 139417854 gb ECR97583.1	hypothetical protein G	(137)	285	68.4	2.9e-09
gi 141235823 gb ECQ56307.1	(131)	292	69.8	1e-09	gi 138274369 gb EBY73568.1	hypothetical protein G	(192)	287	68.8	2.9e-09
gi 139934981 gb ECI47821.1	(184)	294	70.3	1e-09	gi 138621767 gb ECA86898.1	hypothetical protein G	(193)	287	68.8	3e-09
gi 139449633 gb ECF18170.1	(194)	294	70.3	1.1e-09	gi 136508745 gb EB062095.1	hypothetical protein G	(195)	287	68.8	3e-09
gi 508779001 emb CAG37740.1 related to 3-phosphosh	(451)	299	71.5	1.1e-09	gi 135327870 gb EBG89709.1	hypothetical protein G	(196)	287	68.8	3e-09
gi 270259768 emb CBI38901.1	(463)	299	71.5	1.1e-09	gi 3893083 emb CAA10164.1 5-enolpyruvylshikimate	(332)	290	69.6	3.1e-09	
gi 141805848 gb ECT37496.1	(174)	293	70.1	1.1e-09	gi 136829493 gb EB068498.1	hypothetical protein G	(307)	289	69.4	3.3e-09
gi 138461383 gb EBZ83526.1	(178)	293	70.1	1.2e-09	gi 170231 gb AAA34072.1 5-enolpyruvylshikimate-3-	(338)	289	69.4	3.6e-09	
gi 139740652 gb ECH14977.1	(183)	293	70.1	1.2e-09	gi 143203778 gb EDD56578.1	hypothetical protein G	(89)	281	67.4	3.6e-09
gi 220000157 gb ACU76758.1 3-phosphoshikimate 1-c	(422)	298	71.3	1.2e-09	gi 141668834 gb ECS71793.1	hypothetical protein G	(150)	284	68.2	3.7e-09
gi 136414763 gb EB001321.1	(423)	298	71.3	1.2e-09	gi 140448493 gb ECU82608.1	hypothetical protein G	(109)	282	67.7	3.7e-09
gi 257170988 gb ACV48747.1 3-phosphoshikimate 1-c	(430)	298	71.3	1.2e-09	gi 141342655 gb ECR16143.1	hypothetical protein G	(187)	285	68.4	3.8e-09
gi 259420526 emb CBF57577.1	(447)	298	71.3	1.3e-09	gi 139214786 gb ECR19726.1	hypothetical protein G	(310)	288	69.1	3.9e-09
gi 218301277 emb CAU98625.1	(447)	298	71.3	1.3e-09	gi 142629045 gb EC244103.1	hypothetical protein G	(188)	285	68.4	3.9e-09

gi 141309322 gb ECO97031.1	hypothetical protein G	(190)	285 68.4 3.9e-09	gi 1254257728 emb CAP2911473.1	unnamed protein produ	(436)	283 68.2 1.1e-08
gi 119955588 gb ABM12593.1	3-phosphoshikimate 1-c	(446)	290 69.6 4e-09	gi 158064938 emb CAP11431.1	unnamed protein produ	(436)	283 68.2 1.1e-08
gi 141771908 gb ECT20846.1	hypothetical protein G	(118)	282 67.7 4e-09	gi 136149188 gb EBM21932.1	hypothetical protein G	(313)	281 67.7 1.1e-08
gi 142537102 gb ECO79315.1	hypothetical protein G	(165)	284 68.2 4e-09	gi 1256356896 gb ACU707393.1	UDP-N-acetylglucosamin	(450)	283 68.2 1.1e-08
gi 140904031 gb ECO28501.1	hypothetical protein G	(174)	284 68.2 4.2e-09	gi 137322029 gb EBT44686.1	hypothetical protein G	(178)	277 66.7 1.2e-08
gi 137287625 gb EBT25443.1	hypothetical protein G	(179)	284 68.2 4.3e-09	gi 1146407374 gb ABG35880.1	3-phosphoshikimate 1-c	(418)	282 68.0 1.2e-08
gi 1218760993 gb ACU3459.1	3-phosphoshikimate 1-c	(419)	289 69.4 4.3e-09	gi 1261370679 gb ACX73428.1	3-phosphoshikimate 1-c	(426)	282 68.0 1.2e-08
gi 121734706 gb ACM355669.1	3-phosphoshikimate 1-c	(423)	289 69.4 4.4e-09	gi 141714720 gb ECS89901.1	hypothetical protein G	(186)	277 66.8 1.2e-08
gi 138333549 gb EB202341.1	hypothetical protein G	(184)	284 68.2 4.4e-09	gi 167727088 emb CAP13874.1	3-phosphoshikimate 1-	(430)	282 68.0 1.2e-08
gi 135109363 gb EBL97675.1	hypothetical protein G	(158)	283 68.0 4.4e-09	gi 137504641 gb EBU45451.1	hypothetical protein G	(188)	277 66.8 1.2e-08
gi 1261282220 gb ACX64191.1	3-phosphoshikimate 1-c	(430)	289 69.4 4.4e-09	gi 154018070 dbj BAD59440.1	putative 5-enolpyruvyl	(437)	282 68.0 1.2e-08
gi 144179424 gb EDU44599.1	hypothetical protein G	(236)	285 68.5 4.7e-09	gi 137129293 gb EBS36687.1	hypothetical protein G	(225)	278 67.0 1.2e-08
gi 13410961 dbj BAA32276.1	3-phosphoshikimate 1-ca	(391)	288 69.2 4.7e-09	gi 167291814 gb ABZ44678.1	Sequence 18616 from pa	(439)	282 68.0 1.2e-08
gi 138211244 gb EBY44003.1	hypothetical protein G	(126)	281 67.5 4.9e-09	gi 105807601 gb AAG19594.1	3-phosphoshikimate 1-ca	(439)	282 68.0 1.2e-08
gi 134641468 gb EBC55730.1	hypothetical protein G	(128)	281 67.5 4.9e-09	gi 197053758 gb ACH25456.1	Sequence 8 from patent	(439)	282 68.0 1.2e-08
gi 138316610 gb EBY3784.1	hypothetical protein G	(154)	282 67.8 5e-09	gi 146448291 gb AAS94946.1	3-phosphoshikimate 1-ca	(439)	282 68.0 1.2e-08
gi 1251844766 gb EES72779.1	3-phosphoshikimate 1-c	(430)	288 69.2 5.1e-09	gi 140867415 gb ECOO4516.1	hypothetical protein G	(165)	276 66.5 1.3e-08
gi 143911526 gb EDH51939.1	hypothetical protein G	(366)	287 69.0 5.1e-09	gi 143304386 gb ED21860.1	hypothetical protein G	(416)	281 67.7 1.4e-08
gi 135193457 gb EBD88436.1	hypothetical protein G	(195)	283 68.0 5.3e-09	gi 167043753 gb ABZ08445.1	putative EPSP synthase	(422)	281 67.8 1.4e-08
gi 134857212 gb EBD88436.1	hypothetical protein G	(166)	282 67.8 5.3e-09	gi 137062259 gb EBR99387.1	hypothetical protein G	(190)	276 66.6 1.4e-08
gi 136863779 gb EBQ91435.1	hypothetical protein G	(124)	280 67.3 5.5e-09	gi 1226244298 dbj BAH54646.1	3-phosphoshikimate 1-	(438)	281 67.8 1.4e-08
gi 1421913245 gb ECY30625.1	hypothetical protein G	(181)	282 67.8 5.7e-09	gi 140677546 gb ECM75558.1	hypothetical protein G	(117)	273 65.8 1.4e-08
gi 167175245 gb ACX30625.1	EPSP synthase [Glnkgo	(353)	286 68.8 5.7e-09	gi 129606692 dbj BAC70753.1	putative 3-phosphoshik	(446)	281 67.8 1.4e-08
gi 139026901 gb ECC89959.1	hypothetical protein G	(131)	280 67.3 5.8e-09	gi 141347116 gb ECL19224.1	hypothetical protein G	(100)	272 65.6 1.5e-08
gi 132397219 emb CAP17256.1	3-phosphoshikimate 1-c	(501)	288 69.2 5.8e-09	gi 135601197 gb EB168833.1	hypothetical protein G	(195)	276 66.6 1.5e-08
gi 126208610 gb ACX22778.1	3-phosphoshikimate 1-c	(421)	286 68.8 6.7e-09	gi 142307382 gb ECX13686.1	hypothetical protein G	(167)	275 66.3 1.5e-08
gi 141103300 gb ECP64812.1	hypothetical protein G	(132)	279 67.1 6.7e-09	gi 137781568 gb EBV96306.1	hypothetical protein G	(289)	278 67.1 1.5e-08
gi 138859647 gb ECL18477.1	hypothetical protein G	(188)	281 67.6 6.9e-09	gi 141055410 gb ECP32712.1	hypothetical protein G	(177)	275 66.3 1.5e-08
gi 136894582 gb EBR09947.1	hypothetical protein G	(161)	280 67.4 6.9e-09	gi 143120588 gb EDC96439.1	hypothetical protein G	(178)	275 66.3 1.6e-08
gi 145217759 gb ABP47163.1	3-phosphoshikimate 1-c	(446)	286 68.8 7e-09	gi 12826287 gb ABR98493.1	3-phosphoshikimate-1-car	(429)	280 67.5 1.6e-08
gi 137439612 gb EBU10974.1	hypothetical protein G	(194)	281 67.6 7e-09	gi 167294666 gb ABZ47530.1	Sequence 21468 from pa	(429)	280 67.5 1.6e-08
gi 1218602333 emb CAV32035.1	unnamed protein produ	(413)	285 68.6 7.6e-09	gi 197053759 gb ACH25457.1	Sequence 9 from patent	(429)	280 67.5 1.6e-08
gi 1254257746 emb CAZ91482.1	unnamed protein produ	(413)	285 68.6 7.6e-09	gi 136997668 gb EBR622935.1	hypothetical protein G	(189)	275 66.3 1.6e-08
gi 158064957 emb CAP11440.1	unnamed protein produ	(413)	285 68.6 7.6e-09	gi 136122790 gb EBM06705.1	hypothetical protein G	(163)	274 66.1 1.7e-08
gi 137613393 gb EBV05490.1	hypothetical protein G	(110)	277 66.7 7.7e-09	gi 137991869 gb EBX16169.1	hypothetical protein G	(167)	274 66.1 1.7e-08
gi 135246787 gb EBC40574.1	hypothetical protein G	(396)	284 68.4 8.5e-09	gi 139557235 gb ECS88762.1	hypothetical protein G	(120)	272 65.6 1.7e-08
gi 138115862 gb EBX83138.1	hypothetical protein G	(205)	280 67.4 8.5e-09	gi 140878388 gb ECL012060.1	hypothetical protein G	(171)	274 66.1 1.7e-08
gi 141718967 gb ECS92519.1	hypothetical protein G	(177)	279 67.2 8.7e-09	gi 134993483 gb EBE79617.1	hypothetical protein G	(174)	274 66.1 1.8e-08
gi 138705585 gb ECB44304.1	hypothetical protein G	(183)	279 67.2 8.9e-09	gi 123492616 dbj BAC17589.1	5-enolpyruvylshikimate	(408)	279 67.3 1.8e-08
gi 139308621 gb ECB49455.1	hypothetical protein G	(185)	279 67.2 9e-09	gi 143421907 gb EDB86867.1	hypothetical protein G	(252)	276 66.6 1.8e-08
gi 139600607 gb ECG18735.1	hypothetical protein G	(115)	276 66.5 9.2e-09	gi 139742666 gb ECH16215.1	hypothetical protein G	(130)	272 65.6 1.8e-08
gi 120563746 gb ABM29490.1	3-phosphoshikimate 1-c	(439)	284 68.4 9.3e-09	gi 140266570 gb ECK66195.1	hypothetical protein G	(223)	275 66.4 1.9e-08
gi 126586404 gb ACU97537.1	3-phosphoshikimate 1-c	(444)	284 68.4 9.3e-09	gi 18163275 gb AAF73581.1	3-phosphoshikimate 1-car	(441)	279 67.3 1.9e-08
gi 140300301 gb ECL09713.1	hypothetical protein G	(151)	277 66.7 1e-08	gi 143286973 gb EDS12890.1	hypothetical protein G	(330)	277 66.9 2e-08
gi 135862908 gb EBK31807.1	hypothetical protein G	(181)	278 67.0 1e-08	gi 134403526 gb EBB15016.1	hypothetical protein G	(171)	273 65.9 2e-08
gi 135775967 gb EBU77004.1	hypothetical protein G	(181)	278 67.0 1e-08	gi 141281733 gb ECQ86790.1	hypothetical protein G	(239)	275 66.4 2e-08
gi 135076534 gb EBF34204.1	hypothetical protein G	(215)	279 67.2 1e-08	gi 1218602347 emb CAV32047.1	unnamed protein produ	(413)	278 67.1 2.1e-08
gi 173660021 emb CAT82628.1	3-phosphoshikimate 1-c	(420)	283 68.2 1e-08	gi 1218602343 emb CAV32045.1	unnamed protein produ	(413)	278 67.1 2.1e-08
gi 146270033 gb ABQ17025.1	3-phosphoshikimate 1-c	(420)	283 68.2 1e-08	gi 142965654 gb EDB84756.1	hypothetical protein G	(134)	271 65.4 2.2e-08
gi 138212148 gb EBY44623.1	hypothetical protein G	(131)	276 66.5 1e-08	gi 1269096620 gb AC221056.1	UDP-N-acetylglucosamin	(438)	278 67.1 2.2e-08
gi 183174668 gb ACC39778.1	3-phosphoshikimate 1-c	(431)	283 68.2 1.1e-08	gi 110822831 gb ABG98115.1	3-phosphoshikimate 1-c	(438)	278 67.1 2.2e-08

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gi 140795343 gb ECN56244.1	hypothetical protein G	(162)	272 65.7 2.2e-08	gi 158064949 emb CAP211436.1	unnamed protein produ	(413)	273 66.1 4.3e-08
gi 135937496 gb EBK83135.1	hypothetical protein G	(169)	272 65.7 2.3e-08	gi 1254257738 emb CAP291478.1	unnamed protein produ	(413)	273 66.1 4.3e-08
gi 137598092 gb EBU96799.1	hypothetical protein G	(88)	268 64.7 2.3e-08	gi 158064965 emb CAP11444.1	unnamed protein produ	(413)	273 66.1 4.3e-08
gi 139983349 gb ECI81241.1	hypothetical protein G	(284)	275 66.4 2.3e-08	gi 1218602325 emb CAP32028.1	unnamed protein produ	(413)	273 66.1 4.3e-08
gi 140862513 gb ECO69651.1	hypothetical protein G	(127)	270 65.2 2.4e-08	gi 1158064963 emb CAP11443.1	unnamed protein produ	(413)	273 66.1 4.3e-08
gi 1218602331 gb ECN32033.1	unnamed protein produ	(413)	277 66.9 2.4e-08	gi 1218602341 emb CAP32044.1	unnamed protein produ	(413)	273 66.1 4.3e-08
gi 158064955 emb CAP11439.1	unnamed protein produ	(413)	277 66.9 2.4e-08	gi 1254257754 emb CAP291486.1	unnamed protein produ	(413)	273 66.1 4.3e-08
gi 1254257744 emb CAP291481.1	unnamed protein produ	(413)	277 66.9 2.4e-08	gi 1218602321 emb CAP32026.1	unnamed protein produ	(413)	273 66.1 4.3e-08
gi 144221934 gb EDU75270.1	hypothetical protein G	(415)	277 66.9 2.4e-08	gi 1254257752 emb CAP291485.1	unnamed protein produ	(413)	273 66.1 4.3e-08
gi 139916392 gb ECI34592.1	hypothetical protein G	(133)	270 65.2 2.5e-08	gi 1138393082 gb EB35835.1	hypothetical protein G	(183)	268 64.9 4.4e-08
gi 155229780 gb AAV45159.1	3-phosphoshikimate 1-ca	(429)	277 66.9 2.5e-08	gi 1139715640 gb ECG97590.1	hypothetical protein G	(94)	264 63.9 4.4e-08
gi 1260078369 gb EEM66074.1	3-phosphoshikimate 1-c	(135)	270 65.2 2.5e-08	gi 1141443969 gb ECR86984.1	hypothetical protein G	(137)	266 64.4 4.5e-08
gi 134563127 gb ECG08803.1	hypothetical protein G	(99)	268 64.8 2.6e-08	gi 1222136865 gb ACW45082.1	5-enolpyruvylshikimate	(317)	271 65.6 4.5e-08
gi 140607098 gb ECM36324.1	hypothetical protein G	(232)	273 66.0 2.6e-08	gi 1136937780 gb EBR29049.1	hypothetical protein G	(169)	267 64.7 4.7e-08
gi 188783188 gb EAR14361.1	3-phosphoshikimate 1-ca	(409)	276 66.7 2.8e-08	gi 1139801494 gb ECH56019.1	hypothetical protein G	(172)	267 64.7 4.8e-08
gi 1254257740 emb CAP291479.1	unnamed protein produ	(413)	276 66.7 2.8e-08	gi 1143840587 gb EDH00849.1	hypothetical protein G	(90)	263 63.7 4.9e-08
gi 1218602349 emb CAP32048.1	unnamed protein produ	(413)	276 66.7 2.8e-08	gi 1139765372 gb ECH30618.1	hypothetical protein G	(126)	265 64.2 4.9e-08
gi 1218602327 emb CAP32029.1	unnamed protein produ	(413)	276 66.7 2.8e-08	gi 143754925 gb EDG61826.1	hypothetical protein G	(177)	267 64.7 4.9e-08
gi 158064943 emb ECG08803.1	unnamed protein produ	(413)	276 66.7 2.8e-08	gi 143715076 gb EDG41631.1	hypothetical protein G	(150)	266 64.4 4.9e-08
gi 1254257742 emb CAP291480.1	unnamed protein produ	(413)	276 66.7 2.8e-08	gi 137599818 gb EBU97767.1	hypothetical protein G	(78)	262 63.5 5e-08
gi 1218602319 emb CAP32025.1	unnamed protein produ	(413)	276 66.7 2.8e-08	gi 1138181735 gb EBY25008.1	hypothetical protein G	(180)	267 64.7 5e-08
gi 1254257732 emb CAP291475.1	unnamed protein produ	(413)	276 66.7 2.8e-08	gi 1135654046 gb EBU01552.1	hypothetical protein G	(187)	267 64.7 5.1e-08
gi 158064953 emb CAP11438.1	unnamed protein produ	(413)	276 66.7 2.8e-08	gi 11398263 gb AAS05884.1	AroA [Mycobacterium avi	(435)	272 65.9 5.2e-08
gi 1218602329 emb CAP32031.1	unnamed protein produ	(413)	276 66.7 2.8e-08	gi 1135117332 gb EBF60283.1	hypothetical protein G	(86)	262 63.5 5.4e-08
gi 158064951 emb CAP11437.1	unnamed protein produ	(413)	276 66.7 2.8e-08	gi 1135805402 gb EBY95639.1	hypothetical protein G	(128)	266 64.5 5.4e-08
gi 193083953 gb ACF09630.1	3-phosphoshikimate 1-c	(426)	276 66.7 2.9e-08	gi 164454856 dbj BAF96973.1	putative 5-enolpyruvyl	(122)	264 64.0 5.5e-08
gi 143138581 gb EDD09640.1	hypothetical protein G	(84)	266 64.3 3e-08	gi 139675536 gb ECG69534.1	hypothetical protein G	(92)	262 63.5 5.7e-08
gi 134557848 gb EBC05598.1	hypothetical protein G	(407)	275 66.5 3.2e-08	gi 157225151 gb AAW40208.1	3-phosphoshikimate 1-ca	(420)	271 65.7 5.8e-08
gi 134423121 gb EBB26248.1	hypothetical protein G	(182)	270 65.3 3.3e-08	gi 1139349149 gb ECF58652.1	hypothetical protein G	(136)	264 64.0 6e-08
gi 139189020 gb ECE01933.1	hypothetical protein G	(182)	270 65.3 3.3e-08	gi 1139602942 gb ECG20278.1	hypothetical protein G	(266)	268 65.0 6e-08
gi 110620656 emb CAP335934.1	putative 3-phosphosh	(422)	275 66.5 3.3e-08	gi 127651558 emb CAD36891.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 1256690345 gb ACV10682.1	3-phosphoshikimate 1-c	(428)	275 66.5 3.3e-08	gi 127651530 emb CAD36877.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 141573503 gb ECS42617.1	hypothetical protein G	(114)	267 64.6 3.3e-08	gi 127651514 emb CAD36869.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 118171644 gb ABK72540.1	3-phosphoshikimate 1-c	(443)	275 66.5 3.4e-08	gi 127651568 emb CAD36896.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 1261373400 gb ACX76145.1	EPSP synthase (3-phosp	(455)	275 66.5 3.5e-08	gi 127651544 emb CAD36884.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 164454854 dbj BAF96972.1	putative 5-enolpyruvyl	(122)	267 64.6 3.5e-08	gi 127651548 emb CAD36886.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 1219860009 gb ACU40351.1	3-phosphoshikimate 1-c	(475)	275 66.5 3.6e-08	gi 127651536 emb CAD36880.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 158064959 emb CAP11441.1	unnamed protein produ	(413)	274 66.3 3.7e-08	gi 127651564 emb CAD36894.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 1254257748 emb CAP291483.1	unnamed protein produ	(413)	274 66.3 3.7e-08	gi 127651534 emb CAD36879.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 1218602335 emb CAP32038.1	unnamed protein produ	(416)	274 66.3 3.7e-08	gi 127651542 emb CAD36891.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 114337300 gb ABT68148.1	UDP-N-acetylglucosamin	(416)	274 66.3 3.7e-08	gi 127651532 emb CAD36878.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 178464619 dbj BAG19139.1	putative 5-enolpyruvyl	(450)	274 66.3 4e-08	gi 127651538 emb CAD36881.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 145751285 gb ABP96766.1	putative 5-enolpyruvyl	(122)	266 64.4 4.1e-08	gi 127651528 emb CAD36879.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 127651526 emb CAD36875.1	putative 5-enolpyruvyl	(122)	266 64.4 4.1e-08	gi 127651546 emb CAD36895.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 134322213 gb EBA63460.1	hypothetical protein G	(283)	271 65.6 4.1e-08	gi 127651570 emb CAD36897.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 144012227 gb EDT23678.1	hypothetical protein G	(173)	268 64.9 4.1e-08	gi 145751141 gb ABP96759.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 1254257734 emb CAP291476.1	unnamed protein produ	(413)	273 66.1 4.3e-08	gi 127651506 emb CAD36865.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 158064945 emb CAP11434.1	unnamed protein produ	(413)	273 66.1 4.3e-08	gi 127651522 emb CAD36873.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 1254257730 emb CAP291474.1	unnamed protein produ	(413)	273 66.1 4.3e-08	gi 145750944 gb ABP96750.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 1218602339 emb CAP32043.1	unnamed protein produ	(413)	273 66.1 4.3e-08	gi 164454852 dbj BAF96971.1	putative 5-enolpyruvyl	(122)	263 63.8 6.3e-08
gi 158064940 emb CAP11432.1	unnamed protein produ	(413)	273 66.1 4.3e-08				

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gi 27651524 emb CAD36874.1 putative 5-enolpyruvyl (122)	263 63.8 6.3e-08	gi 27651502 emb CAD36863.1 putative 5-enolpyruvyl (122)	259 62.9 1.1e-07
gi 27651508 emb CAD36866.1 putative 5-enolpyruvyl (122)	263 63.8 6.3e-08	gi 27651540 emb CAD36882.1 putative 5-enolpyruvyl (122)	259 62.9 1.1e-07
gi 167044926 gb AB209592.1 putative EPSF synthase (394)	270 65.5 6.3e-08	gi 27651512 emb CAD36868.1 putative 5-enolpyruvyl (122)	259 62.9 1.1e-07
gi 134554900 gb EBC03811.1 hypothetical protein G (173)	265 64.2 6.4e-08	gi 142748549 gb EDA29468.1 hypothetical protein G (238)	263 63.9 1.1e-07
gi 256793860 gb ACV24529.1 3-phosphoshikimate 1-c (427)	270 65.5 6.8e-08	gi 136501410 gb EBO57343.1 hypothetical protein G (287)	264 64.1 1.1e-07
gi 269096461 gb AC220897.1 3-phosphoshikimate 1-c (448)	270 65.5 7.1e-08	gi 142081421 gb ECV43511.1 hypothetical protein G (106)	258 62.7 1.1e-07
gi 136187309 gb EBM46881.1 hypothetical protein G (279)	267 64.7 7.2e-08	gi 136076477 gb EBJ75135.1 hypothetical protein G (149)	263 63.2 1.2e-07
gi 145705758 gb ABP96741.1 putative 5-enolpyruvyl (122)	262 63.6 7.3e-08	gi 143380471 gb EDB67259.1 hypothetical protein G (212)	262 63.7 1.2e-07
gi 27651498 emb CAD36861.1 putative 5-enolpyruvyl (122)	262 63.6 7.3e-08	gi 136649531 gb EBF50530.1 hypothetical protein G (110)	258 62.7 1.2e-07
gi 27651510 emb CAD36867.1 putative 5-enolpyruvyl (122)	262 63.6 7.3e-08	gi 110673799 gb ABG82786.1 3-phosphoshikimate 1-c (424)	266 64.6 1.2e-07
gi 27651494 emb CAD36848.1 putative 5-enolpyruvyl (122)	262 63.6 7.3e-08	gi 197053755 gb ACH25453.1 Sequence 5 from patent (428)	266 64.6 1.2e-07
gi 62948560 gb AAV22964.1 putative 5-enolpyruvyl (122)	262 63.6 7.3e-08	gi 150237931 gb AAK78871.1 AE007605_4 5-enolpyruvyl (428)	266 64.6 1.2e-07
gi 76577727 gb ABA54134.1 putative 5-enolpyruvyls (122)	262 63.6 7.3e-08	gi 188499339 gb ACD52475.1 3-phosphoshikimate 1-c (433)	266 64.6 1.2e-07
gi 27651552 emb CAD36888.1 putative 5-enolpyruvyl (122)	262 63.6 7.3e-08	gi 136661055 gb EBP57371.1 hypothetical protein G (102)	257 62.5 1.3e-07
gi 155369179 dbj BAF73638.1 putative 5-enolpyruvyl (122)	262 63.6 7.3e-08	gi 140161022 gb ECU93154.1 hypothetical protein G (171)	260 63.2 1.3e-07
gi 145751418 gb ABP96773.1 putative 5-enolpyruvyl (122)	262 63.6 7.3e-08	gi 153999656 gb ABG556079.1 3-phosphoshikimate 1-c (421)	265 64.4 1.4e-07
gi 27651562 emb CAD36893.1 putative 5-enolpyruvyl (122)	262 63.6 7.3e-08	gi 139710378 gb ECG93826.1 hypothetical protein G (131)	258 62.7 1.4e-07
gi 27651554 emb CAD36889.1 putative 5-enolpyruvyl (122)	262 63.6 7.3e-08	gi 197053756 gb ACH25454.1 Sequence 6 from patent (424)	265 64.4 1.4e-07
gi 137383382 gb EBT79041.1 hypothetical protein G (151)	263 63.8 7.6e-08	gi 181443551 dbj BAB80402.1 3-phosphoshikimate 1-c (424)	265 64.4 1.4e-07
gi 254257750 emb CAZ91484.1 unnamed protein produ (413)	269 65.3 7.6e-08	gi 137626582 gb EBV13018.1 hypothetical protein G (188)	260 63.2 1.4e-07
gi 218602337 emb CAV32040.1 unnamed protein produ (413)	269 65.3 7.6e-08	gi 135307869 gb EBG76462.1 hypothetical protein G (167)	259 63.0 1.5e-07
gi 158064961 emb CAP11442.1 unnamed protein produ (413)	269 65.3 7.6e-08	gi 27651560 emb CAD36892.1 putative 5-enolpyruvyl (122)	257 62.5 1.5e-07
gi 270153723 gb AC261561.1 3-phosphoshikimate 1-c (420)	269 65.3 7.7e-08	gi 27651518 emb CAD36871.1 putative 5-enolpyruvyl (122)	257 62.5 1.5e-07
gi 238876015 gb ACR75722.1 3-phosphoshikimate 1-c (427)	269 65.3 7.8e-08	gi 136265415 gb EBM99606.1 hypothetical protein G (129)	257 62.5 1.6e-07
gi 143832006 gb EDG94622.1 hypothetical protein G (162)	263 63.8 8.1e-08	gi 143532053 gb EDE50399.1 hypothetical protein G (300)	262 63.7 1.6e-07
gi 135286490 gb EBG663923.1 hypothetical protein G (164)	263 63.8 8.1e-08	gi 140653357 gb ECM58430.1 hypothetical protein G (304)	262 63.7 1.6e-07
gi 139901711 gb ECT24311.1 hypothetical protein G (118)	261 63.3 8.2e-08	gi 137897728 gb EBM63033.1 hypothetical protein G (112)	256 62.3 1.6e-07
gi 27651520 emb CAD36872.1 putative 5-enolpyruvyl (122)	261 63.3 8.4e-08	gi 5104222 dbj BAV79537.1 3-phosphoshikimate 1-ca (427)	264 64.2 1.6e-07
gi 140482317 gb ECL96815.1 hypothetical protein G (171)	263 63.8 8.4e-08	gi 167296048 gb ABZ48912.1 Sequence 22850 from pa (427)	264 64.2 1.6e-07
gi 218602323 emb CAV32027.1 unnamed protein produ (413)	268 65.0 8.8e-08	gi 197053753 gb ACH25451.1 Sequence 3 from patent (427)	264 64.2 1.6e-07
gi 254257736 emb CAZ91477.1 unnamed protein produ (413)	268 65.0 8.8e-08	gi 138831441 gb AAK47667.1 3-phosphoshikimate 1-ca (450)	264 64.2 1.7e-07
gi 158064947 emb CAP11435.1 unnamed protein produ (413)	268 65.0 8.8e-08	gi 2072694 emb CAB08328.1 3-PHOSPHOSHIKIMATE 1-CA (450)	264 64.2 1.7e-07
gi 137240909 gb EBS99122.1 hypothetical protein G (111)	260 63.1 9e-08	gi 1061198 emb CAA36510.1 unnamed protein product (450)	264 64.2 1.7e-07
gi 135097052 gb EBF47290.1 hypothetical protein G (367)	267 64.8 9.2e-08	gi 148722956 gb ABR07581.1 3-phosphoshikimate 1-c (450)	264 64.2 1.7e-07
gi 137289947 gb EBT26741.1 hypothetical protein G (121)	260 63.1 9.6e-08	gi 253321772 gb ACT26375.1 3-phosphoshikimate 1-c (450)	264 64.2 1.7e-07
gi 27651496 emb CAD36949.1 putative 5-enolpyruvyl (122)	260 63.1 9.7e-08	gi 121494765 emb CAL73246.1 3-phosphoshikimate 1- (450)	264 64.2 1.7e-07
gi 208968957 dbj BAG74299.1 putative 5-enolpyruvyl (122)	260 63.1 9.7e-08	gi 1224774724 dbj BAH27530.1 3-phosphoshikimate 1- (450)	264 64.2 1.7e-07
gi 27651550 emb CAD36887.1 putative 5-enolpyruvyl (122)	260 63.1 9.7e-08	gi 148507242 gb ABQ75051.1 3-phosphoshikimate 1-c (450)	264 64.2 1.7e-07
gi 27651500 emb CAD36862.1 putative 5-enolpyruvyl (122)	260 63.1 9.7e-08	gi 121494857 emb CAL73339.1 3-phosphoshikimate 1- (450)	264 64.2 1.7e-07
gi 27651566 emb CAD36889.1 putative 5-enolpyruvyl (122)	260 63.1 9.7e-08	gi 124599370 gb EAY58474.1 3-phosphoshikimate 1-c (450)	264 64.2 1.7e-07
gi 134801291 gb EBD52889.1 hypothetical protein G (398)	267 64.8 9.8e-08	gi 1499281 gb AAA25356.1 key enzyme from the shiki (450)	264 64.2 1.7e-07
gi 140356997 gb ECL21447.1 hypothetical protein G (126)	260 63.1 1e-07	gi 141690760 gb ECS82975.1 hypothetical protein G (166)	258 62.8 1.7e-07
gi 138607893 gb ECA77389.1 hypothetical protein G (127)	260 63.1 1e-07	gi 27651556 emb CAD36890.1 putative 5-enolpyruvyl (122)	256 62.3 1.7e-07
gi 137578273 gb EBU82720.1 hypothetical protein G (91)	258 62.7 1e-07	gi 229419569 gb EE034616.1 3-phosphoshikimate 1-c (422)	263 64.0 1.8e-07
gi 218602345 emb CAV32046.1 unnamed protein produ (413)	267 64.8 1e-07	gi 137063681 gb EBS00190.1 hypothetical protein G (112)	255 62.1 1.9e-07
gi 110682538 gb ABG85908.1 3-phosphoshikimate 1-c (424)	267 64.8 1e-07	gi 135856457 gb EBR27747.1 hypothetical protein G (157)	257 62.6 1.9e-07
gi 138570151 gb ABU014902.1 3-phosphoshikimate 1-c (431)	267 64.8 1.1e-07	gi 137691378 gb EBV47987.1 hypothetical protein G (135)	256 62.3 1.9e-07
gi 137440713 gb EBU11589.1 hypothetical protein G (140)	260 63.2 1.1e-07	gi 135563245 gb EBT44958.1 hypothetical protein G (321)	261 63.5 1.9e-07
gi 142613449 gb EC233107.1 hypothetical protein G (101)	258 62.7 1.1e-07	gi 37359246 gb AAN77867.1 5-enolpyruvylshikimate- (330)	261 63.5 2e-07
gi 140227212 gb ECK35845.1 hypothetical protein G (169)	261 63.4 1.1e-07	gi 135501503 gb EBT05440.1 hypothetical protein G (144)	256 62.3 2e-07
gi 139117331 gb ECD53221.1 hypothetical protein G (201)	262 63.7 1.1e-07	gi 137064853 gb EBS00850.1 hypothetical protein G (172)	257 62.6 2e-07

gi 143123363 gb EDC98470.1	hypothetical protein G	(407)	262	63.1	2.1e-07	gi 139635409 gb ECG41393.1	hypothetical protein G	(171)	251	61.3	4.8e-07
gi 136331388 gb EDN44372.1	hypothetical protein G	(264)	259	63.1	2.2e-07	gi 144013831 gb EDT28211.1	hypothetical protein G	(104)	248	60.6	4.8e-07
gi 138955423 gb ECC57612.1	hypothetical protein G	(312)	260	63.3	2.2e-07	gi 140108183 gb ECU59174.1	hypothetical protein G	(124)	249	60.9	4.8e-07
gi 138583181 gb ECA36615.1	hypothetical protein G	(170)	256	62.4	2.3e-07	gi 126220875 gb ACV32173.1	3-phosphoshikimate 1-c	(690)	259	63.1	5e-07
gi 1276515041 emb CAD36864.1	putative 5-enolpyruvyl	(122)	254	61.9	2.3e-07	gi 140443001 gb ECU82971.1	hypothetical protein G	(154)	250	61.1	5e-07
gi 140006705 gb ECI96016.1	hypothetical protein G	(180)	256	62.4	2.4e-07	gi 141008389 gb ECOP1391.1	hypothetical protein G	(255)	253	61.8	5e-07
gi 149645101 emb CAG98673.1	KLLA0F19712p [Kluvero	(1578)	269	65.5	2.4e-07	gi 1257792900 gb ACF67278.1	5-enolpyruvylshikimate	(518)	257	62.8	5.2e-07
gi 139887343 gb ABX02280.1	3-phosphoshikimate 1-c	(429)	261	63.6	2.5e-07	gi 1433030018 gb EDC30145.1	hypothetical protein G	(269)	253	61.8	5.3e-07
gi 140047125 gb ECU22455.1	hypothetical protein G	(119)	253	61.7	2.6e-07	gi 141952437 gb ECU40453.1	hypothetical protein G	(166)	250	61.1	5.4e-07
gi 1219690818 gb ACL32041.1	3-phosphoshikimate 1-c	(385)	260	63.4	2.6e-07	gi 135861318 gb EBX30804.1	hypothetical protein G	(101)	247	60.4	5.4e-07
gi 141988236 gb ECU65126.1	hypothetical protein G	(102)	252	61.4	2.6e-07	gi 1373238418 gb EB97769.1	hypothetical protein G	(172)	250	61.1	5.5e-07
gi 141584608 gb ECS47173.1	hypothetical protein G	(171)	255	62.2	2.7e-07	gi 141430667 gb ECR77456.1	hypothetical protein G	(64)	244	59.7	5.6e-07
gi 135293978 gb EBG68304.1	hypothetical protein G	(397)	260	63.4	2.7e-07	gi 1256581891 gb ACU93026.1	3-phosphoshikimate 1-c	(409)	255	62.3	5.7e-07
gi 136534380 gb EBO78463.1	hypothetical protein G	(175)	255	62.2	2.7e-07	gi 137391662 gb EBR83813.1	hypothetical protein G	(108)	247	60.4	5.7e-07
gi 134806237 gb EBD55969.1	hypothetical protein G	(176)	255	62.2	2.7e-07	gi 110279818 gb ABG58004.1	3-phosphoshikimate 1-c	(415)	255	62.3	5.7e-07
gi 143336668 gb EDE41053.1	hypothetical protein G	(252)	257	62.7	2.8e-07	gi 139510525 gb ECF56688.1	hypothetical protein G	(155)	249	60.9	5.8e-07
gi 150013290 gb ABR55741.1	3-phosphoshikimate 1-c	(433)	260	63.4	2.9e-07	gi 139853511 gb ECH92492.1	hypothetical protein G	(184)	250	61.1	5.9e-07
gi 139775605 gb ECH37721.1	hypothetical protein G	(160)	254	61.9	2.9e-07	gi 189144043 emb CAU79291.1	3-phosphoshikimate 1-c	(425)	255	62.3	5.9e-07
gi 137831221 gb EBW24864.1	hypothetical protein G	(164)	254	62.0	3e-07	gi 115129578 gb AB182765.1	3-phosphoshikimate 1-c	(425)	255	62.3	5.9e-07
gi 140133038 gb ECU76373.1	hypothetical protein G	(100)	251	61.2	3e-07	gi 134253354 gb EBA52448.1	3-phosphoshikimate 1-c	(425)	255	62.3	5.9e-07
gi 167273761 gb ABZ26625.1	Sequence 563 from pate	(462)	260	63.4	3.1e-07	gi 156252874 gb ABU61380.1	3-phosphoshikimate 1-c	(425)	255	62.3	5.9e-07
gi 6458826 gb AAFI0666.1 AE001959_6	3-phosphoshiki	(462)	260	63.4	3.1e-07	gi 151570774 gb EDN36428.1	3-phosphoshikimate 1-c	(425)	255	62.3	5.9e-07
gi 138145249 gb EBX99526.1	hypothetical protein G	(144)	253	61.7	3.1e-07	gi 142647091 gb EDC56827.1	hypothetical protein G	(117)	247	60.4	6.1e-07
gi 136179936 gb EBW42003.1	hypothetical protein G	(283)	257	62.7	3.1e-07	gi 137267092 gb EBT13999.1	hypothetical protein G	(117)	247	60.4	6.1e-07
gi 134811217 gb EBD59044.1	hypothetical protein G	(470)	260	63.4	3.1e-07	gi 143596894 gb EDF78687.1	hypothetical protein G	(331)	253	61.9	6.3e-07
gi 138516940 gb ECA13844.1	hypothetical protein G	(177)	254	62.0	3.2e-07	gi 142239667 gb ECW63816.1	hypothetical protein G	(172)	249	60.9	6.4e-07
gi 135740077 gb EBJ54747.1	hypothetical protein G	(182)	254	62.0	3.3e-07	gi 138895041 gb EBR10177.1	hypothetical protein G	(75)	244	59.7	6.4e-07
gi 138175700 gb EBO20773.1	hypothetical protein G	(216)	255	62.2	3.3e-07	gi 141074770 gb ECF44839.1	hypothetical protein G	(150)	248	60.7	6.5e-07
gi 136514553 gb EBO65808.1	hypothetical protein G	(111)	251	61.3	3.3e-07	gi 135475905 gb EBH89025.1	hypothetical protein G	(298)	252	61.7	6.7e-07
gi 135862039 gb ABN57228.1	3-phosphoshikimate 1-c	(422)	259	63.2	3.3e-07	gi 151572218 gb EDN37872.1	3-phosphoshikimate 1-c	(425)	254	62.1	6.8e-07
gi 139813738 gb ECH64771.1	hypothetical protein G	(156)	253	61.7	3.3e-07	gi 118423587 gb ABK89977.1	3-phosphoshikimate 1-c	(425)	254	62.1	6.8e-07
gi 139864844 gb ECI00209.1	hypothetical protein G	(265)	256	62.5	3.4e-07	gi 134049878 gb ABO46949.1	3-phosphoshikimate 1-c	(425)	254	62.1	6.8e-07
gi 257228991 gb ACV53022.1	5-enolpyruvylshikimate	(518)	260	63.4	3.4e-07	gi 1257792898 gb ACV67277.1	5-enolpyruvylshikimate	(518)	255	62.4	7e-07
gi 136423872 gb EBO07160.1	hypothetical protein G	(378)	258	62.9	3.4e-07	gi 143429820 gb EDF50925.1	hypothetical protein G	(165)	248	60.7	7.1e-07
gi 134065071 gb EBC34706.1	hypothetical protein G	(118)	251	61.3	3.5e-07	gi 141358911 gb ECR27338.1	hypothetical protein G	(231)	250	61.2	7.1e-07
gi 141081778 gb ECP49687.1	hypothetical protein G	(102)	250	61.0	3.5e-07	gi 140986024 gb ECOC85762.1	hypothetical protein G	(141)	247	60.5	7.2e-07
gi 135401199 gb EBH38962.1	hypothetical protein G	(391)	258	63.0	3.5e-07	gi 138433557 gb EBX64253.1	hypothetical protein G	(169)	248	60.7	7.3e-07
gi 134563693 gb EBC09142.1	hypothetical protein G	(284)	256	62.5	3.6e-07	gi 142847470 gb EDB03074.1	hypothetical protein G	(89)	244	59.8	7.4e-07
gi 138206680 gb EBY40866.1	hypothetical protein G	(293)	256	62.5	3.7e-07	gi 142029705 gb ECU98902.1	hypothetical protein G	(107)	245	60.0	7.5e-07
gi 136650521 gb EBP51121.1	hypothetical protein G	(152)	252	61.5	3.7e-07	gi 157122156 gb EDC66296.1	3-phosphoshikimate 1-c	(425)	253	61.9	7.8e-07
gi 138083436 gb EBX67931.1	hypothetical protein G	(93)	249	60.8	3.7e-07	gi 1254842865 gb EET1279.1	3-phosphoshikimate 1-c	(426)	253	61.9	7.8e-07
gi 140638840 gb ECM48477.1	hypothetical protein G	(134)	251	61.3	3.9e-07	gi 167597744 gb ABZ87742.1	3-phosphoshikimate 1-c	(426)	253	61.9	7.8e-07
gi 140136930 gb ECU78639.1	hypothetical protein G	(82)	248	60.6	3.9e-07	gi 1257228989 gb ACV53021.1	5-enolpyruvylshikimate	(518)	254	62.2	8e-07
gi 194553871 gb ABF45301.1	3-phosphoshikimate 1-ca	(440)	258	63.0	3.9e-07	gi 189170087 gb ACD80082.1	5-enolpyruvylshikimate	(520)	254	62.2	8.1e-07
gi 137155531 gb EB551327.1	hypothetical protein G	(166)	252	61.5	4e-07	gi 142052471 gb ECV19283.1	hypothetical protein G	(117)	245	60.0	8.1e-07
gi 1276515161 emb CAD36870.1	putative 5-enolpyruvyl	(122)	250	61.1	4.1e-07	gi 138143615 gb EBX98782.1	hypothetical protein G	(272)	250	61.2	8.2e-07
gi 118164801 gb ABK65737.1	3-phosphoshikimate 1-c	(419)	257	62.8	4.3e-07	gi 136951562 gb EBR36833.1	hypothetical protein G	(85)	243	59.5	8.2e-07
gi 150033408 gb ABR65521.1	3-phosphoshikimate 1-c	(429)	257	62.8	4.4e-07	gi 135519158 gb EBI16781.1	hypothetical protein G	(142)	246	60.3	8.3e-07
gi 137153403 gb EBS50130.1	hypothetical protein G	(97)	248	60.6	4.4e-07	gi 139910522 gb ECI30664.1	hypothetical protein G	(171)	247	60.5	8.5e-07
gi 141842424 gb ECT63134.1	hypothetical protein G	(165)	251	61.3	4.6e-07	gi 141936386 gb ECU28820.1	hypothetical protein G	(105)	244	59.8	8.6e-07
gi 131620004 emb CAD95348.1	3-PHOSPHOSHIKIMATE 1-C	(450)	257	62.8	4.6e-07	gi 1350979282 gb EBF47442.1	hypothetical protein G	(106)	244	59.8	8.6e-07

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gi 239838503 gb ACN30300.1	3-phosphoshikimate 1-c	(476)	253	62.0	8.6e-07	gi 137262334 gb EBT11318.1	hypothetical protein G	(99)	240	58.9	1.4e-06
gi 138638232 gb ECA97023.1	hypothetical protein G	(150)	246	60.3	8.7e-07	gi 143445595 gb ED99941.1	hypothetical protein G	(84)	239	58.7	1.5e-06
gi 141196850 gb EQ28892.1	hypothetical protein G	(129)	245	60.0	8.8e-07	gi 1256579750 gb ACU09886.1	3-phosphoshikimate 1-c	(448)	249	61.1	1.5e-06
gi 1166657870 gb ABK14814.1	3-phosphoshikimate 1-c	(421)	252	61.7	9e-07	gi 138379540 gb EB226536.1	hypothetical protein G	(118)	241	59.2	1.5e-06
gi 139588193 gb ECG10061.1	hypothetical protein G	(155)	246	60.3	9e-07	gi 141006545 gb ECR00155.1	hypothetical protein G	(280)	246	60.4	1.5e-06
gi 124840528 gb EET18964.1	3-phosphoshikimate 1-c	(425)	252	61.7	9e-07	gi 141867175 gb ECR00548.1	hypothetical protein G	(107)	240	59.0	1.5e-06
gi 151568465 gb EDN34119.1	hypothetical protein F	(425)	252	61.7	9e-07	gi 134557324 gb EBC05284.1	hypothetical protein G	(212)	244	59.9	1.6e-06
gi 110320519 emb CAL08604.1	3-phosphoshikimate 1-	(425)	252	61.7	9e-07	gi 142394073 gb ECX74727.1	hypothetical protein G	(153)	242	59.4	1.6e-06
gi 56604207 emb CA45221.1	3-phosphoshikimate 1-c	(425)	252	61.7	9e-07	gi 142143769 gb ECV91152.1	hypothetical protein G	(132)	241	59.2	1.6e-06
gi 132663055 gb AB034701.1	3-phosphoshikimate 1-c	(429)	252	61.7	9.1e-07	gi 187723900 gb AC252151.1	3-phosphoshikimate 1-c	(433)	248	60.9	1.6e-06
gi 138209136 gb EBX42538.1	hypothetical protein G	(160)	246	60.3	9.2e-07	gi 143676556 gb EDG21358.1	hypothetical protein G	(443)	248	60.9	1.7e-06
gi 170783792 gb ACB37380.1	5-enolpyruvylshikimate	(520)	253	62.0	9.3e-07	gi 140342741 gb ECU11664.1	hypothetical protein G	(193)	243	59.7	1.7e-06
gi 193230774 gb ACF16410.1	5-enolpyruvylshikimate	(521)	253	62.0	9.3e-07	gi 140213869 gb ECC30436.1	hypothetical protein G	(100)	239	58.7	1.7e-06
gi 16456435 gb ABY61050.1	5-enolpyruvylshikimate	(521)	253	62.0	9.3e-07	gi 218757794 gb ACU08693.1	3-phosphoshikimate 1-c	(450)	248	60.9	1.7e-06
gi 15113313 gb AAE68897.1	Sequence 4 from patent	(446)	252	61.7	9.4e-07	gi 139588191 gb ECG10059.1	hypothetical protein G	(169)	242	59.5	1.7e-06
gi 126317774 gb AC045770.1	putative 3-phosphoshik	(446)	252	61.7	9.4e-07	gi 1213504186 emb CAS92804.1	unnamed protein produ	(461)	248	60.9	1.7e-06
gi 139526428 gb ECF67652.1	hypothetical protein G	(165)	246	60.3	9.5e-07	gi 137313236 gb EBM39796.1	hypothetical protein G	(148)	241	59.2	1.8e-06
gi 137707930 gb EBV57186.1	hypothetical protein G	(72)	241	59.1	9.5e-07	gi 142092265 gb ECV52480.1	hypothetical protein G	(149)	241	59.2	1.8e-06
gi 134453802 gb EBB43977.1	hypothetical protein G	(119)	244	59.8	9.5e-07	gi 137181885 gb EB566113.1	hypothetical protein G	(151)	241	59.2	1.8e-06
gi 139774290 gb ECH36760.1	hypothetical protein G	(120)	244	59.8	9.6e-07	gi 394748 emb CAA51291.1	3-phosphoshikimate 1-car	(92)	238	58.5	1.8e-06
gi 218301283 emb CAU98630.1	unnamed protein produ	(463)	252	61.7	9.7e-07	gi 475972 gb AAAL7939.1	pentafunctional enzyme [P	(1581)	255	62.6	1.8e-06
gi 218301280 emb CAU98627.1	unnamed protein produ	(468)	252	61.7	9.8e-07	gi 1170775096 gb ACB33235.1	3-phosphoshikimate 1-c	(699)	240	61.4	1.9e-06
gi 138638589 gb ECA95687.1	hypothetical protein G	(150)	245	60.1	1e-06	gi 146346304 gb EDK32840.1	AroA [Clostridium kluy	(426)	247	60.7	1.9e-06
gi 139975788 gb ECT75973.1	hypothetical protein G	(210)	247	60.5	1e-06	gi 219567771 dbj BAH05755.1	hypothetical protein	(426)	247	60.7	1.9e-06
gi 140359360 gb ECL23139.1	hypothetical protein G	(111)	243	59.6	1e-06	gi 45047634 emb CAF30761.1	3-phosphoshikimate 1-c	(429)	247	60.7	1.9e-06
gi 58416522 emb CAT127635.1	3-phosphoshikimate 1-c	(427)	251	61.5	1e-06	gi 136246949 gb EBM87035.1	hypothetical protein G	(115)	239	58.8	1.9e-06
gi 142291970 gb ECX02262.1	hypothetical protein G	(116)	243	59.6	1.1e-06	gi 139022251 gb ECC86765.1	hypothetical protein G	(161)	241	59.2	1.9e-06
gi 139761003 gb ECH27597.1	hypothetical protein G	(99)	242	59.4	1.1e-06	gi 187712349 gb ACD30646.1	3-phosphoshikimate 1-c	(425)	246	60.5	2.1e-06
gi 141063525 gb EEN60202.1	hypothetical protein G	(319)	249	61.0	1.1e-06	gi 767821981 gb ABA54869.1	putative 5-enolpyruvyls	(520)	247	60.7	2.2e-06
gi 63334331 gb AAY40472.1	5-enol-pyruvylshikimate	(447)	251	61.5	1.1e-06	gi 48526086 gb AAT45244.1	5-enol-pyruvylshikimate	(523)	247	60.7	2.2e-06
gi 167283499 gb ABZ36363.1	Sequence 10301 from pa	(392)	250	61.3	1.1e-06	gi 140786127 gb ECM49774.1	hypothetical protein G	(166)	240	59.0	2.3e-06
gi 138705584 gb ECB44303.1	hypothetical protein G	(172)	245	60.1	1.1e-06	gi 144157096 gb EDJ28064.1	hypothetical protein G	(460)	246	60.5	2.3e-06
gi 219867914 gb ACL48249.1	3-phosphoshikimate 1-c	(484)	251	61.5	1.2e-06	gi 141335868 gb ECR27311.1	hypothetical protein G	(146)	239	58.8	2.3e-06
gi 1237907951 gb EEP82352.1	pentafunctional AROM p	(1580)	258	63.2	1.2e-06	gi 1403635320 gb ECU27383.1	hypothetical protein G	(107)	237	58.3	2.4e-06
gi 135666238 gb EBJ09113.1	hypothetical protein G	(157)	244	59.9	1.2e-06	gi 137034169 gb EBR83523.1	hypothetical protein G	(127)	238	58.6	2.4e-06
gi 143922947 gb EDH60152.1	hypothetical protein G	(96)	241	59.1	1.2e-06	gi 167294770 gb AB247634.1	Sequence 21572 from pa	(410)	245	60.3	2.4e-06
gi 137776675 gb EBV93594.1	hypothetical protein G	(264)	247	60.6	1.2e-06	gi 15457888 emb CAB49378.1	aroA 3-phosphoshikimate	(410)	245	60.3	2.4e-06
gi 2485248 gb AAB73384.1	Sequence 53 from p	(444)	250	61.3	1.3e-06	gi 142798898 gb EDA66645.1	hypothetical protein G	(179)	240	59.1	2.4e-06
gi 15957571 gb AAE08245.1	Sequence 53 from patent	(444)	250	61.3	1.3e-06	gi 139597835 gb ECG16899.1	hypothetical protein G	(157)	239	58.8	2.5e-06
gi 2484171 gb AAB72307.1	Sequence 53 from p	(444)	250	61.3	1.3e-06	gi 138386372 gb EB231255.1	hypothetical protein G	(222)	241	59.3	2.5e-06
gi 144974750 gb ABP12461.1	Sequence 53 from paten	(444)	250	61.3	1.3e-06	gi 137956336 gb EBW96154.1	hypothetical protein G	(142)	238	58.6	2.6e-06
gi 63334354 gb AAY40473.1	5-enol-pyruvylshikimate	(447)	250	61.3	1.3e-06	gi 139225737 gb ECR27527.1	hypothetical protein G	(299)	242	59.6	2.8e-06
gi 140055797 gb ECU27025.1	hypothetical protein G	(90)	240	58.9	1.3e-06	gi 50840349 gb EAT93016.1	3-phosphoshikimate 1-ca	(429)	244	60.1	2.9e-06
gi 145689058 gb ABP89564.1	5-enolpyruvylshikimate	(151)	243	59.7	1.4e-06	gi 141003111 gb EC097872.1	hypothetical protein G	(138)	237	58.4	3e-06
gi 197068384 gb ACH29559.1	Sequence 178 from pate	(129)	242	59.4	1.4e-06	gi 137645515 gb EBV22535.1	hypothetical protein G	(99)	235	57.9	3e-06
gi 136491500 gb EBO50896.1	hypothetical protein G	(299)	247	60.6	1.4e-06	gi 633344403 gb AAY40475.1	5-enol-pyruvylshikimate	(446)	244	60.1	3e-06
gi 170229 gb AAA34071.1	5-enolpyruvylshikimate-3-	(518)	250	61.3	1.4e-06	gi 142194442 gb ECM29770.1	hypothetical protein G	(339)	242	59.6	3.1e-06
gi 157142998 gb ABV24481.1	5-enolpyruvylshikimate	(521)	250	61.3	1.4e-06	gi 140436263 gb ECL73891.1	hypothetical protein G	(287)	241	59.4	3.1e-06
gi 116054912 emb CAL56989.1	5-enolpyruvylshikimat	(316)	247	60.6	1.4e-06	gi 140728122 gb ECN10699.1	hypothetical protein G	(90)	234	57.7	3.2e-06
gi 281079464 gb ADA36172.1	Sequence 5 from patent	(525)	250	61.4	1.4e-06	gi 1578035890 gb EDO83060.1	3-phosphoshikimate 1-c	(435)	243	59.9	3.4e-06

gi 126220435 gb ABN83941.1 3-phosphoshikimate 1-c (435)	243 59.9 3.4e-06	gi 170374 gb AAA34136.1 5-enolpyruvylshikimate-3-	(520)	241 59.5 5.2e-06
gi 169654021 gb EDS86095.1 3-phosphoshikimate 1-c (435)	243 59.9 3.4e-06	gi 136810426 gb EBQ55796.1 hypothetical protein G (142)	(142)	233 57.6 5.4e-06
gi 1237505533 gb AQC97851.1 3-phosphoshikimate 1-c (435)	243 59.9 3.4e-06	gi 134923875 gb EB322883.1 hypothetical protein G (103)	(103)	231 57.1 5.5e-06
gi 157935341 gb ED091011.1 3-phosphoshikimate 1-c (435)	243 59.9 3.4e-06	gi 139483444 gb ECF39330.1 hypothetical protein G (104)	(104)	231 57.1 5.5e-06
gi 126226989 gb ABN90529.1 3-phosphoshikimate 1-c (435)	243 59.9 3.4e-06	gi 137771645 gb EBV90851.1 hypothetical protein G (246)	(246)	236 58.3 5.7e-06
gi 124213979 gb ES26181.1 3-phosphoshikimate 1-c (435)	243 59.9 3.4e-06	gi 133753671 gb AAK20397.1 AF349754_1 5-enolpyruvyl (347)	(347)	238 58.8 5.7e-06
gi 141920103 gb ECU17301.1 hypothetical protein G (162)	237 58.4 3.4e-06	gi 135696355 gb EBJ27660.1 hypothetical protein G (151)	(151)	237 57.6 5.7e-06
gi 151133211 gb AAE68895.1 Sequence 2 from patent (444)	243 59.9 3.4e-06	gi 143613097 gb EDR89452.1 hypothetical protein G (350)	(350)	238 58.8 5.7e-06
gi 163343661 gb AAY40474.1 5-enol-pyruvylshikimate (446)	243 59.9 3.4e-06	gi 140710291 gb ECW98191.1 hypothetical protein G (152)	(152)	233 57.6 5.7e-06
gi 143084014 gb EDC69721.1 hypothetical protein G (165)	237 58.4 3.5e-06	gi 143289772 gb ED14254.1 hypothetical protein G (415)	(415)	239 59.0 5.8e-06
gi 137626704 gb EBV13083.1 hypothetical protein G (166)	237 58.4 3.5e-06	gi 135670534 gb EBJ11760.1 hypothetical protein G (111)	(111)	231 57.1 5.8e-06
gi 17862401 gb ABBO4469.1 5-enolpyruvylshikimate (235)	239 58.9 3.5e-06	gi 138345236 gb EBX10124.1 hypothetical protein G (155)	(155)	233 57.6 5.8e-06
gi 141562291 gb ES38975.1 hypothetical protein G (122)	235 57.9 3.6e-06	gi 135418683 gb EBH50720.1 hypothetical protein G (425)	(425)	239 59.0 5.9e-06
gi 139813737 gb ECH64770.1 hypothetical protein G (175)	237 58.4 3.6e-06	gi 194344913 gb EDX25879.1 UDP-N-acetylglucosamin (509)	(509)	240 59.3 5.9e-06
gi 135591171 gb EBI62617.1 hypothetical protein G (176)	237 58.4 3.7e-06	gi 134266433 gb ABO68628.1 UDP-N-acetylglucosamin (434)	(434)	239 59.0 6e-06
gi 178464133 dbj BAG18653.1 putative 5-enolpyruvyl (415)	242 59.6 3.7e-06	gi 144061091 gb EDI58614.1 hypothetical protein G (72)	(72)	228 56.4 6.2e-06
gi 141309321 gb ECQ97030.1 hypothetical protein G (153)	236 58.2 3.7e-06	gi 139178037 gb ECQ94123.1 hypothetical protein G (274)	(274)	236 58.3 6.2e-06
gi 135648868 gb EBI98362.1 hypothetical protein G (133)	235 58.0 3.8e-06	gi 167324427 gb ABG61020.1 Sequence 11819 from pa (392)	(392)	238 58.8 6.3e-06
gi 139756385 gb ECH24426.1 hypothetical protein G (187)	237 58.4 3.9e-06	gi 140103800 gb ECU56094.1 hypothetical protein G (147)	(147)	232 57.4 6.4e-06
gi 142178523 gb ECW17637.1 hypothetical protein G (87)	232 57.3 4.1e-06	gi 571174571 gb AAW33954.1 AROM pentafunctional en (1539)	(1539)	246 60.7 6.5e-06
gi 134899027 gb EBB16415.1 hypothetical protein G (170)	236 58.2 4.1e-06	gi 238032531 emb CAY70554.1 Pentafunctional arom (1545)	(1545)	246 60.7 6.5e-06
gi 143836029 gb EDG97541.1 hypothetical protein G (173)	236 58.2 4.2e-06	gi 143131822 gb EDD04677.1 hypothetical protein G (408)	(408)	238 58.8 6.6e-06
gi 57158522 dbj BAD84452.1 5-enolpyruvylshikimate (399)	241 59.4 4.2e-06	gi 223643106 emb CAX41980.1 pentafunctional AROM (1550)	(1550)	246 60.7 6.6e-06
gi 134840320 gb EBD77599.1 hypothetical protein G (147)	235 58.0 4.2e-06	gi 134661181 gb EBG67295.1 hypothetical protein G (210)	(210)	234 57.8 6.6e-06
gi 139920800 gb ECI37946.1 hypothetical protein G (174)	236 58.2 4.2e-06	gi 124417311 emb CAX82326.1 unnamed protein produ (1118)	(1118)	244 60.3 6.6e-06
gi 85821331 gb EAQ42478.1 3-phosphoshikimate 1-ca (409)	241 59.4 4.3e-06	gi 137677308 gb EBV40060.1 hypothetical protein G (112)	(112)	230 56.9 6.8e-06
gi 218093860 emb CAT71432.1 unnamed protein produ (415)	241 59.4 4.3e-06	gi 140455535 gb ECU87542.1 hypothetical protein G (259)	(259)	235 58.1 6.8e-06
gi 161726851 emb CAP47296.1 unnamed protein produ (424)	241 59.4 4.4e-06	gi 184212267 gb EDU09310.1 3-phosphoshikimate 1-c (419)	(419)	238 58.8 6.9e-06
gi 197145001 gb AAU95129.1 3-phosphoshikimate 1-ca (424)	241 59.4 4.4e-06	gi 557407691 gb AAV64030.1 5-enolpyruvylshikimate (515)	(515)	239 59.1 7e-06
gi 197053757 gb ACH25455.1 Sequence 7 from patent (424)	241 59.4 4.4e-06	gi 134675150 gb EBG75402.1 hypothetical protein G (83)	(83)	228 56.4 7e-06
gi 137935241 gb EBW84278.1 hypothetical protein G (260)	238 58.7 4.4e-06	gi 124852501 gb AAB73386.1 I14475 Sequence 55 from p (444)	(444)	238 58.8 7.1e-06
gi 1229468460 gb ACQ70232.1 UDP-N-acetylglucosamin (433)	241 59.4 4.5e-06	gi 144974752 gb ABP12463.1 Sequence 55 from paten (444)	(444)	238 58.8 7.1e-06
gi 139453944 gb ECF21005.1 hypothetical protein G (97)	232 57.3 4.5e-06	gi 24841173 gb AAB72309.1 I149202 Sequence 55 from p (444)	(444)	238 58.8 7.1e-06
gi 167515671 gb AAU27697.1 5-enolpyruvylshikimate- (516)	242 59.7 4.5e-06	gi 151133101 gb AAE68894.1 Sequence 55 from patent (444)	(444)	238 58.8 7.1e-06
gi 144974751 gb ABP12462.1 Sequence 54 from paten (444)	241 59.4 4.6e-06	gi 135805587 gb EBJ95757.1 hypothetical protein G (102)	(102)	229 56.7 7.2e-06
gi 124852491 gb AAB73385.1 I14474 Sequence 54 from p (444)	241 59.4 4.6e-06	gi 141550051 gb EC30458.1 hypothetical protein G (144)	(144)	231 57.1 7.3e-06
gi 159575721 gb AAE08246.1 Sequence 54 from patent (444)	241 59.4 4.6e-06	gi 139559348 gb ECF90296.1 hypothetical protein G (105)	(105)	229 56.7 7.4e-06
gi 141894571 gb ECT99515.1 hypothetical protein G (140)	234 57.8 4.6e-06	gi 138456986 gb EBZ80350.1 hypothetical protein G (174)	(174)	232 57.4 7.5e-06
gi 136243804 gb EBW84904.1 hypothetical protein G (85)	231 57.0 4.6e-06	gi 140463850 gb ECU91459.1 hypothetical protein G (302)	(302)	235 58.1 7.8e-06
gi 1348467361 gb EBD81731.1 hypothetical protein G (275)	238 58.7 4.7e-06	gi 124852581 gb AAB73394.1 I14483 Sequence 63 from p (426)	(426)	237 58.6 7.9e-06
gi 48526088 gb AAT45245.1 5-enol-pyruvylshikimate (454)	241 59.5 4.7e-06	gi 1418721 gb AAA21937.1 3-phosphoshikimate-1-carb (426)	(426)	237 58.6 7.9e-06
gi 143575554 gb EDF71579.1 hypothetical protein G (145)	234 57.8 4.8e-06	gi 144974760 gb ABP12471.1 Sequence 63 from paten (426)	(426)	237 58.6 7.9e-06
gi 141074771 gb ECP44840.1 hypothetical protein G (147)	234 57.8 4.8e-06	gi 12484181 gb AAB72317.1 I149210 Sequence 63 from p (426)	(426)	237 58.6 7.9e-06
gi 1350392571 gb EBF10408.1 hypothetical protein G (342)	239 59.0 4.9e-06	gi 5957581 gb AAE08255.1 Sequence 63 from patent (426)	(426)	237 58.6 7.9e-06
gi 139575354 gb ECG01163.1 hypothetical protein G (245)	237 58.5 4.9e-06	gi 125418421 emb CAF25305.1 unnamed protein produc (430)	(430)	237 58.6 7.9e-06
gi 1404319381 gb ECL70931.1 hypothetical protein G (295)	238 58.7 5e-06	gi 413249871 emb CAF19468.1 3-PHOSPHOSHIKIMATE 1-C (430)	(430)	237 58.6 7.9e-06
gi 141040121 gb ECP22036.1 hypothetical protein G (213)	236 58.3 5e-06	gi 217229978 gb ACK11087.1 Sequence 412 from pate (430)	(430)	237 58.6 7.9e-06
gi 1378393271 gb EBW29556.1 hypothetical protein G (110)	232 57.3 5e-06	gi 140844847 dbj BAF53846.1 hypothetical protein (430)	(430)	237 58.6 7.9e-06
gi 138376871 gb EBZ25278.1 hypothetical protein G (154)	234 57.8 5e-06	gi 1213235301 dbj BA98157.1 5-enolpyruvylshikimate (430)	(430)	237 58.6 7.9e-06
gi 1400292571 gb ECU11191.1 hypothetical protein G (98)	231 57.1 5.2e-06	gi 169191 gb AAA33699.1 5-enolpyruvylshikimate-3- (516)	(516)	238 58.9 8e-06

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gi 62786941 gb AA06820.1	Sequence 27 from patent	(516)	238 58.9	8e-06	gi 121228841 gb ABW51359.1	putative 3-phosphoshik	(435)	234 58.0	1.2e-05
gi 6732247 emb CABE9241.1	unnamed protein product	(516)	238 58.9	8e-06	gi 147745265 gb EDK52345.1	3-phosphoshikimate 1-c	(435)	234 58.0	1.2e-05
gi 223548872 gb EEF5361.1	3-phosphoshikimate 1-c	(518)	238 58.9	8.1e-06	gi 148029459 gb EDR87364.1	3-phosphoshikimate 1-c	(435)	234 58.0	1.2e-05
gi 49526084 gb AAT45243.1	5-enol-pyruvylshikimate	(519)	238 58.9	8.1e-06	gi 147750605 gb EDK57674.1	3-phosphoshikimate 1-c	(435)	234 58.0	1.2e-05
gi 139820928 gb ECH69483.1	hypothetical protein G	(116)	229 56.7	8.1e-06	gi 509511391 gb AAT98840.1	UDP-N-acetylglucosamine	(456)	234 58.0	1.3e-05
gi 137104211 gb EBU36390.1	hypothetical protein G	(116)	229 56.7	8.1e-06	gi 142229932 gb ECW56578.1	hypothetical protein G	(144)	227 56.3	1.3e-05
gi 135107136 gb EBF53752.1	hypothetical protein G	(441)	237 58.6	8.1e-06	gi 142028895 gb ECU98128.1	hypothetical protein G	(392)	237 57.8	1.3e-05
gi 140849292 gb ECN91757.1	hypothetical protein G	(268)	234 57.9	8.1e-06	gi 135733489 gb EBU50660.1	hypothetical protein G	(123)	226 56.1	1.3e-05
gi 139849794 gb ECH89899.1	hypothetical protein G	(163)	231 57.2	8.1e-06	gi 138846965 gb ECI13935.1	hypothetical protein G	(205)	229 56.8	1.3e-05
gi 138831381 gb ECF56430.1	hypothetical protein G	(139)	230 56.9	8.2e-06	gi 141533718 gb ECJ18963.1	hypothetical protein G	(148)	227 56.3	1.3e-05
gi 142748501 gb EDA29469.1	hypothetical protein G	(198)	232 57.4	8.3e-06	gi 135588646 gb EBT61063.1	hypothetical protein G	(91)	224 55.6	1.3e-05
gi 116611308 gb ABK04032.1	3-phosphoshikimate 1-c	(460)	237 58.6	8.4e-06	gi 485260661 gb AAT45234.1	5-enol-pyruvylshikimate	(357)	232 57.5	1.4e-05
gi 138910924 gb ECC38856.1	hypothetical protein G	(103)	228 56.5	8.4e-06	gi 485260701 gb AAT45236.1	5-enol-pyruvylshikimate	(358)	232 57.5	1.4e-05
gi 135933191 gb EBK84238.1	hypothetical protein G	(332)	235 58.1	8.5e-06	gi 485260721 gb AAT45237.1	5-enol-pyruvylshikimate	(360)	232 57.5	1.4e-05
gi 135040418 gb EBF11141.1	hypothetical protein G	(335)	235 58.1	8.5e-06	gi 143663997 gb EDG14715.1	hypothetical protein G	(112)	225 55.9	1.4e-05
gi 182908332 gb ECC38856.1	Sequence 4351 from pat	(471)	237 58.6	8.6e-06	gi 1241914647 gb EER87791.1	hypothetical protein S	(506)	234 58.0	1.4e-05
gi 137781153 gb EBV96078.1	hypothetical protein G	(154)	230 57.0	8.9e-06	gi 229565672 gb ACQ79523.1	3-phosphoshikimate 1-c	(434)	233 57.8	1.4e-05
gi 42350971 gb AAD13108.1	5-enolpyruvylshikimate 3	(498)	237 58.6	9e-06	gi 139938554 gb ECI50388.1	hypothetical protein G	(82)	223 55.4	1.4e-05
gi 229431757 gb EEO41969.1	3-phosphoshikimate 1-c	(424)	236 58.4	9e-06	gi 167515691 gb AAL27698.1	5-enolpyruvyl	(516)	234 58.0	1.4e-05
gi 256035894 gb ACU59438.1	3-phosphoshikimate 1-c	(426)	236 58.4	9.1e-06	gi 188938601 gb AAL81823.1	3-phosphoshikimate 1-ca	(440)	233 57.8	1.4e-05
gi 141225757 gb ECQ49018.1	hypothetical protein G	(113)	228 56.5	9.1e-06	gi 197053768 gb ACH25466.1	Sequence 18 from patent	(521)	234 58.0	1.4e-05
gi 254219555 gb EET08939.1	3-phosphoshikimate 1-c	(435)	236 58.4	9.2e-06	gi 121550781 gb AAM63771.1	5-enolpyruvylshikimate-	(521)	234 58.0	1.4e-05
gi 52208741 emb CAH34577.1	putative 3-phosphoskim	(435)	236 58.4	9.2e-06	gi 143159253 gb EDD24485.1	hypothetical protein G	(279)	230 57.1	1.5e-05
gi 76579593 gb ABA49068.1	putative 3-phosphoskim	(435)	236 58.4	9.2e-06	gi 142514368 gb ECV62998.1	hypothetical protein G	(105)	224 55.6	1.5e-05
gi 137080022 gb EBS07853.1	hypothetical protein G	(166)	230 57.0	9.5e-06	gi 138740714 gb ECB86755.1	hypothetical protein G	(90)	223 55.4	1.5e-05
gi 139813261 gb ECH64420.1	hypothetical protein G	(104)	227 56.3	9.8e-06	gi 302681381 emb CAC82655.1	5-enolpyruvylshikimate	(409)	232 57.6	1.6e-05
gi 136153838 gb EDA74965.1	hypothetical protein G	(173)	230 57.0	9.9e-06	gi 143770891 emb CAL42356.1	3-phosphoshikimate 1-	(409)	232 57.6	1.6e-05
gi 152625833 gb ABT18187.1	Sequence 105657 from p	(411)	235 58.2	1e-05	gi 138146448 gb EBY00346.1	putative 5-enolpyruvyl	(153)	226 56.1	1.6e-05
gi 260198061 gb EEW95577.1	3-phosphoshikimate 1-c	(421)	235 58.2	1e-05	gi 167042884 gb ABZ07600.1	putative EPSP synthase	(183)	227 56.4	1.6e-05
gi 268614908 gb ACZ09276.1	3-phosphoshikimate 1-c	(424)	235 58.2	1e-05	gi 136927795 gb EBR23477.1	hypothetical protein G	(157)	226 56.1	1.6e-05
gi 207087579 gb ED264862.1	3-phosphoshikimate 1-c	(432)	235 58.2	1.1e-05	gi 178463819 dbj BAG18339.1	putative UDP-N-acetyl	(509)	233 57.8	1.6e-05
gi 182512361 gb AAL65913.1	AF440389_1 5-enolpyruvyl	(518)	236 58.4	1.1e-05	gi 134894270 gb EBE13265.1	hypothetical protein G	(135)	225 55.9	1.6e-05
gi 257796482 gb ACV67419.1	3-phosphoshikimate 1-c	(444)	235 58.2	1.1e-05	gi 134306241 gb AAK52934.1	AF360224_1 putative 5-en	(521)	233 57.8	1.7e-05
gi 1418013247 gb ECT35781.1	hypothetical protein G	(165)	229 56.8	1.1e-05	gi 123211131 gb AAG50661.1	AC084242_5 5-enolpyruvyl	(521)	233 57.8	1.7e-05
gi 124021111 emb CAK67586.1	unnamed protein produ	(1488)	242 59.9	1.1e-05	gi 110948101 gb AAG29739.1	AC084414_7 5-enolpyruvyl	(521)	233 57.8	1.7e-05
gi 135886415 gb EBK47897.1	hypothetical protein G	(188)	229 56.8	1.1e-05	gi 270259770 emb CB138903.1	unnamed protein produ	(521)	233 57.8	1.7e-05
gi 139807552 gb ECH60329.1	hypothetical protein G	(173)	229 56.8	1.1e-05	gi 145328821 gb AAK64123.1	putative 5-enolpyruvyls	(521)	233 57.8	1.7e-05
gi 137498472 gb EBU42283.1	hypothetical protein G	(64)	223 55.3	1.1e-05	gi 15957574 gb AAE08248.1	Sequence 56 from patent	(444)	232 57.6	1.7e-05
gi 143196767 gb EDD51467.1	hypothetical protein G	(64)	223 55.3	1.1e-05	gi 2485251 gb AAB73387.1	I144476 Sequence 56 from p	(444)	232 57.6	1.7e-05
gi 142121563 gb ECV74769.1	hypothetical protein G	(411)	234 58.0	1.2e-05	gi 24841174 gb AAB73387.1	I149203 Sequence 56 from p	(444)	232 57.6	1.7e-05
gi 143421721 gb EDE86769.1	hypothetical protein G	(352)	233 57.7	1.2e-05	gi 136514494 gb EB065771.1	hypothetical protein G	(270)	229 56.9	1.7e-05
gi 138609960 gb ECA78837.1	hypothetical protein G	(299)	232 57.5	1.2e-05	gi 135571691 gb EBI50372.1	hypothetical protein G	(232)	228 56.6	1.7e-05
gi 142813513 gb EBR46423.1	hypothetical protein G	(303)	232 57.5	1.2e-05	gi 138887693 gb ECC30776.1	hypothetical protein G	(146)	225 55.9	1.8e-05
gi 135290345 gb EBG66194.1	hypothetical protein G	(132)	227 56.3	1.2e-05	gi 136124879 gb EBM08135.1	hypothetical protein G	(80)	221 55.0	1.9e-05
gi 136974431 gb EBR49789.1	hypothetical protein G	(113)	226 56.1	1.2e-05	gi 460953371 gb AAS80163.1	5-enolpyruvylshikimate-	(514)	232 57.6	1.9e-05
gi 136968507 gb EBR46423.1	hypothetical protein G	(113)	226 56.1	1.2e-05	gi 136717696 gb EBP94335.1	hypothetical protein G	(225)	227 56.4	1.9e-05
gi 261377205 gb ACX79948.1	UDP-N-acetylglucosamin	(434)	234 58.0	1.2e-05	gi 213504182 emb CAS92802.1	unnamed protein produ	(464)	231 57.4	2e-05
gi 126242614 gb ABO05707.1	putative 3-phosphoshik	(435)	234 58.0	1.2e-05	gi 142533801 gb ECY77123.1	hypothetical protein G	(106)	222 55.2	2.1e-05
gi 160697916 gb EDP7886.1	putative 3-phosphoshik	(435)	234 58.0	1.2e-05	gi 137643716 gb EBV21662.1	hypothetical protein G	(95)	221 55.0	2.2e-05
gi 124291405 gb ABN00674.1	putative 3-phosphoshik	(435)	234 58.0	1.2e-05	gi 137729195 gb EBV68871.1	hypothetical protein G	(226)	226 56.2	2.2e-05

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gi 123965218 gb ABE77393.4 EPSP synthase [Allium	(522)	231	57.4	2.2e-05	gi 114974749 gb ABP124460.1 Sequence 52 from paten	(444)	227	56.5	3.4e-05
gi 20226493 gb AAE88870.1 Sequence 3 from patent	(444)	230	57.2	2.2e-05	gi 15957570 gb AAE08244.1 Sequence 52 from patent	(444)	227	56.5	3.4e-05
gi 15113121 gb AAE68898.1 Sequence 5 from patent	(444)	230	57.2	2.2e-05	gi 15113312 gb AAE68896.1 Sequence 3 from patent	(444)	227	56.5	3.4e-05
gi 3714672 emb CAA03525.1 unnamed protein product	(444)	230	57.2	2.2e-05	gi 12485247 gb AAB73383.1 1I44472 Sequence 52 from p	(444)	227	56.5	3.4e-05
gi 62786942 gb AAO06821.1 Sequence 28 from patent	(444)	230	57.2	2.2e-05	gi 1135651047 gb EBI99696.1 hypothetical protein G	(100)	218	54.4	3.5e-05
gi 137244212 gb AAQ32631.1 Sequence 3 from patent	(444)	230	57.2	2.2e-05	gi 1134600018 gb EBG30786.1 hypothetical protein G	(275)	224	55.8	3.5e-05
gi 197053767 gb ACH25465.1 Sequence 17 from paten	(444)	230	57.2	2.2e-05	gi 1134880266 gb EBG30915.1 hypothetical protein G	(399)	222	56.3	3.6e-05
gi 37147038 CAA03538.1 unnamed protein product	(444)	230	57.2	2.2e-05	gi 1238936984 emb CAR25163.1 KLH0G13090p [Lachan	(1579)	234	58.2	3.8e-05
gi 121886542 emb CAD42174.1 unnamed protein produc	(444)	230	57.2	2.2e-05	gi 1141888249 gb ECY95030.1 hypothetical protein G	(115)	218	54.4	3.9e-05
gi 1524383 emb CAA44974.1 3-phosphoshikimate 1-ca	(444)	230	57.2	2.2e-05	gi 1140614574 gb ECM38495.1 hypothetical protein G	(314)	224	55.8	3.9e-05
gi 4774185 emb CAB42493.1 unnamed protein product	(445)	230	57.2	2.2e-05	gi 163003818 gb AAAY25438.1 At2g45300 [Arabidopsis	(520)	227	56.6	3.9e-05
gi 141298247 gb ECQ92973.1 hypothetical protein G	(139)	223	55.5	2.2e-05	gi 110742505 dbj BAE99170.1 5-enolpyruvylshikimat	(520)	227	56.6	3.9e-05
gi 128266275 gb ACP96948.1 Sequence 29166 from pa	(535)	231	57.4	2.3e-05	gi 162786929 gb AAAY06808.1 Sequence 2 from patent	(520)	227	56.6	3.9e-05
gi 135654047 gb EBJ01553.1 hypothetical protein G	(122)	222	55.2	2.3e-05	gi 12583124 gb AAB82633.1 5-enolpyruvylshikimate-3	(520)	227	56.6	3.9e-05
gi 143177389 gb EDD37310.1 hypothetical protein G	(399)	229	56.9	2.4e-05	gi 1295790 emb CAA29828.1 EPSP [Arabidopsis thalia	(520)	227	56.6	3.9e-05
gi 144033885 gb EDT38787.1 hypothetical protein G	(155)	223	55.5	2.5e-05	gi 1281108574 gb ADA52832.1 Sequence 7 from patent	(521)	227	56.6	3.9e-05
gi 251836138 gb EE564675.1 3-phosphoshikimate 1-c	(423)	229	56.9	2.5e-05	gi 156909232 dbj BAD63759.1 3-phosphoshikimate 1-c	(446)	226	56.3	4e-05
gi 138035180 gb EBX38754.1 hypothetical protein G	(136)	222	55.3	2.5e-05	gi 1433337878 gb EDE41942.1 hypothetical protein G	(165)	220	54.9	4e-05
gi 14394087 gb EDH73332.1 hypothetical protein G	(371)	228	56.7	2.6e-05	gi 1139041852 gb ECQ00736.1 hypothetical protein G	(165)	220	54.9	4e-05
gi 226520702 gb ACO66690.1 predicted protein [Mlc	(229)	225	56.0	2.6e-05	gi 140240697 gb ECK48383.1 hypothetical protein G	(273)	223	55.6	4e-05
gi 138955139 gb ECC56131.1 hypothetical protein G	(141)	222	55.3	2.6e-05	gi 1170934465 gb AC539726.1 3-phosphoshikimate 1-c	(399)	225	56.1	4.2e-05
gi 140094177 gb ECU49446.1 hypothetical protein G	(142)	222	55.3	2.6e-05	gi 1138445397 gb EB272304.1 hypothetical protein G	(76)	215	53.7	4.2e-05
gi 136595080 gb EBP17208.1 hypothetical protein G	(472)	229	57.0	2.7e-05	gi 143010366 gb EDC15947.1 hypothetical protein G	(406)	225	56.1	4.2e-05
gi 140662460 gb ECM64704.1 hypothetical protein G	(148)	222	55.3	2.7e-05	gi 137372418 gb EBI72999.1 hypothetical protein G	(128)	218	54.4	4.3e-05
gi 140640638 gb ECZ27895.1 hypothetical protein G	(413)	228	56.7	2.8e-05	gi 1121554705 gb ABW58854.1 3-phosphoshikimate 1-c	(705)	228	56.8	4.4e-05
gi 1440645644 gb ECM53119.1 hypothetical protein G	(297)	226	56.3	2.8e-05	gi 156381718 dbj BAD77626.1 UDP-N-acetylglucosamin	(434)	225	56.1	4.5e-05
gi 139701374 gb ECG87541.1 hypothetical protein G	(154)	222	55.3	2.8e-05	gi 141196760 gb ECQ28828.1 hypothetical protein G	(137)	218	54.4	4.6e-05
gi 143209192 gb EDD60527.1 hypothetical protein G	(357)	227	56.5	2.8e-05	gi 13714674 emb CAA03526.1 unnamed protein product	(444)	225	56.1	4.6e-05
gi 134406690 gb EBB16764.1 hypothetical protein G	(95)	219	54.6	2.9e-05	gi 121886544 emb CAD42175.1 unnamed protein product	(444)	225	56.1	4.6e-05
gi 143692754 gb EDG31345.1 hypothetical protein G	(260)	225	56.0	2.9e-05	gi 13714740 emb CAA03539.1 unnamed protein product	(444)	225	56.1	4.6e-05
gi 197709166 gb ACH72672.1 5-enolpyruvylshikimate	(510)	229	57.0	2.9e-05	gi 133724443 gb AAQ32652.1 Sequence 5 from patent	(444)	225	56.1	4.6e-05
gi 123908863 gb ACS25928.1 UDP-N-acetylglucosamin	(435)	228	56.7	2.9e-05	gi 120226494 gb AAE88871.1 Sequence 5 from patent	(444)	225	56.1	4.6e-05
gi 141110776 gb ECP70130.1 hypothetical protein G	(163)	222	55.3	3e-05	gi 4774187 emb CAB42494.1 unnamed protein product	(445)	225	56.1	4.6e-05
gi 15957569 gb AAE08243.1 Sequence 51 from patent	(444)	228	56.7	3e-05	gi 1262272507 gb ACX40415.1 3-phosphoshikimate 1-c	(385)	224	55.9	4.7e-05
gi 12484159 gb AAB72305.1 1I49198 Sequence 51 from p	(444)	228	56.7	3e-05	gi 142492368 gb ECY47510.1 hypothetical protein G	(147)	218	54.4	4.8e-05
gi 12485246 gb AAB73382.1 1I44471 Sequence 51 from p	(444)	228	56.7	3e-05	gi 1140435310 gb ECL73227.1 hypothetical protein G	(125)	217	54.2	4.9e-05
gi 144974748 gb ABP12459.1 Sequence 51 from paten	(444)	228	56.7	3e-05	gi 111757868 emb CAL65337.1 3-phosphoshikimate 1-	(405)	224	55.9	4.9e-05
gi 143204891 gb EDD57396.1 hypothetical protein G	(389)	227	56.5	3.1e-05	gi 1139194383 gb ECQ50764.1 hypothetical protein G	(131)	217	54.2	5.1e-05
gi 139764010 gb ECH29671.1 hypothetical protein G	(143)	221	55.1	3.1e-05	gi 1139524990 gb ECF66675.1 hypothetical protein G	(94)	215	53.7	5.1e-05
gi 143435517 gb EDE94112.1 hypothetical protein G	(332)	226	56.3	3.1e-05	gi 1138383307 gb EB229157.1 hypothetical protein G	(133)	217	54.2	5.1e-05
gi 138065413 gb EBX54745.1 hypothetical protein G	(64)	216	53.9	3.2e-05	gi 111979103 gb ABH83340.1 Sequence 9 from patent	(506)	225	56.1	5.1e-05
gi 256718776 gb EED32331.1 3-phosphoshikimate 1-c	(421)	227	56.5	3.3e-05	gi 1281079465 gb ADA36173.1 Sequence 8 from patent	(506)	225	56.1	5.1e-05
gi 129429522 gb EEO39734.1 3-phosphoshikimate 1-c	(424)	227	56.5	3.3e-05	gi 1134887116 gb EBG08499.1 hypothetical protein G	(136)	217	54.2	5.2e-05
gi 141323310 gb ECR05886.1 hypothetical protein G	(95)	218	54.4	3.3e-05	gi 1135556587 gb EBY40658.1 hypothetical protein G	(151)	217	54.2	5.7e-05
gi 5125451 emb CAA01426.1 araA [Aeromonas salmonic	(427)	227	56.5	3.3e-05	gi 44889967 emb CAD29607.2 pentafunctional arom p	(1582)	231	57.6	5.8e-05
gi 134867908 gb EBD95726.1 hypothetical protein G	(369)	226	56.3	3.4e-05	gi 1136069640 gb EBL70519.1 hypothetical protein G	(154)	217	54.3	5.8e-05
gi 17815 emb CAA35839.1 5-enolpyruvylshikimate-3-	(516)	228	56.8	3.4e-05	gi 1159131499 gb EDF56612.1 pentafunctional polyke	(1605)	231	57.6	5.9e-05
gi 62786940 gb AAOY06819.1 Sequence 26 from patent	(516)	228	56.8	3.4e-05	gi 137127816 gb EB355887.1 hypothetical protein G	(133)	216	54.0	5.9e-05
gi 136143958 gb EBM18538.1 hypothetical protein G	(370)	226	56.3	3.4e-05	gi 1281108576 gb ADA52834.1 Sequence 9 from patent	(506)	224	55.9	5.9e-05
gi 111979101 gb ABH83338.1 Sequence 7 from patent	(521)	228	56.8	3.4e-05	gi 1145491961 dbj BAB61062.1 3-phosphoshikimate 1-c	(511)	224	55.9	6e-05
gi 12484170 gb AAB72306.1 1I49199 Sequence 52 from p	(444)	227	56.5	3.4e-05	gi 1254256567 emb CAZ91430.1 unnamed protein produ	(511)	224	55.9	6e-05

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gi 157784366 gb AAL07437.1 AF413082.1 EPSP synthase (511)	224	55.9	6e-05	gi 143054617 gb EDC48197.1	hypothetical protein G (335)	217	54.4	0.00011
gi 157244392 gb AAL06593.1 5-enolpyruvylshikimate (511)	224	55.9	6e-05	gi 135802331 gb EBU93691.1	hypothetical protein G (75)	208	52.2	0.00011
gi 152971191 dbj BAD68865.1 putative 5-enolpyruvyl (515)	224	55.9	6e-05	gi 141447793 gb ECR9500.1	hypothetical protein G (147)	212	53.2	0.00011
gi 15296169 dbj BAD67887.1 putative 5-enolpyruvyl (515)	224	55.9	6e-05	gi 1256578504 gb ACU89640.1	UDP-N-acetylglucosamin (416)	218	54.7	0.00012
gi 125553934 gb EAX99539.1 hypothetical protein O (515)	224	55.9	6e-05	gi 139497159 gb ECF47452.1	hypothetical protein G (94)	209	52.5	0.00012
gi 113594752 dbj BAF18626.1 Os06g0133900 [Oryza s (515)	224	55.9	6e-05	gi 135290648 gb EBG66366.1	hypothetical protein G (220)	214	53.7	0.00012
gi 148797283 gb EDU40782.1 pentafunctional AROM p (864)	227	56.7	6.1e-05	gi 143352907 gb EDB50882.1	hypothetical protein G (429)	218	54.7	0.00012
gi 140093644 gb ECJ53238.1 hypothetical protein G (269)	220	55.0	6.1e-05	gi 134840321 gb EBU07600.1	hypothetical protein G (135)	211	53.0	0.00012
gi 133507166 gb EBI09056.1 hypothetical protein G (101)	214	53.5	6.2e-05	gi 1281079463 gb ADA36171.1	Sequence 1 from patent (515)	219	54.9	0.00012
gi 144065936 gb EDF62214.1 hypothetical protein G (121)	215	53.8	6.3e-05	gi 124850309 gb AAN63155.1	5-enolpyruvylshikimate- (445)	218	54.7	0.00013
gi 1119950797 gb ABM09708.1 putative UDP-N-acetylgl (467)	223	55.7	6.4e-05	gi 16415786 emb CA001096.1	5-enolpyruvylshikimate (445)	218	54.7	0.00013
gi 137552102 gb EBU070915.1 hypothetical protein G (124)	215	53.8	6.4e-05	gi 141795168 gb ECJ33018.1	hypothetical protein G (139)	211	53.0	0.00013
gi 156569933 gb AAV99867.1 Sequence 5 from patent (570)	224	56.0	6.6e-05	gi 139755777 gb ECH24015.1	hypothetical protein G (118)	210	52.7	0.00013
gi 167249310 gb AB225917.1 Sequence 5 from patent (570)	224	56.0	6.6e-05	gi 140152196 gb ECJ87114.1	hypothetical protein G (140)	211	53.0	0.00013
gi 210071512 gb EER25601.1 3-dehydroquinate synth (1571)	230	57.4	6.6e-05	gi 142887871 gb EDB28923.1	hypothetical protein G (394)	217	54.4	0.00013
gi 144189617 gb EDU52210.1 hypothetical protein G (180)	217	54.3	6.7e-05	gi 137648475 gb EBV23890.1	hypothetical protein G (173)	212	53.2	0.00013
gi 119412546 gb EAM22487.1 pentafunctional polype (1578)	230	57.4	6.7e-05	gi 138618826 gb ECB84865.1	hypothetical protein G (76)	207	52.0	0.00013
gi 49529154 emb CAG62820.1 unnamed protein produc (1579)	230	57.4	6.7e-05	gi 141081748 gb ECF49664.1	hypothetical protein G (152)	211	53.0	0.00014
gi 141443548 gb ECR86688.1 hypothetical protein G (153)	216	54.0	6.7e-05	gi 1218722059 gb EED21477.1	pentafunctional polype (1577)	225	56.4	0.00014
gi 139064301 gb ECD16501.1 hypothetical protein G (254)	219	54.8	6.7e-05	gi 139333289 gb ECB54589.1	hypothetical protein G (252)	214	53.7	0.00014
gi 143026908 gb EDC27859.1 hypothetical protein G (159)	216	54.0	6.9e-05	gi 135766604 gb EBU71201.1	hypothetical protein G (155)	211	53.0	0.00014
gi 137722143 gb EBV64909.1 hypothetical protein G (115)	214	53.6	7e-05	gi 144098861 gb ED185676.1	hypothetical protein G (363)	216	54.2	0.00014
gi 136049990 gb EBU57288.1 hypothetical protein G (202)	217	54.3	7.4e-05	gi 140096140 gb ECJ50823.1	hypothetical protein G (115)	209	52.5	0.00014
gi 139610443 gb ECG25482.1 hypothetical protein G (286)	219	54.8	7.4e-05	gi 138465730 gb EB034255.1	hypothetical protein G (136)	210	52.8	0.00014
gi 141676308 gb ECG575854.1 hypothetical protein G (244)	218	54.5	7.5e-05	gi 141209606 gb EC037721.1	hypothetical protein G (137)	210	52.8	0.00015
gi 136654155 gb EBP53271.1 hypothetical protein G (348)	220	55.0	7.6e-05	gi 140557113 gb AAR87844.1	5-enolpyruvylshikimate- (445)	217	54.5	0.00015
gi 134912558 gb EBE25356.1 hypothetical protein G (128)	214	53.6	7.6e-05	gi 136447507 gb EB022455.1	hypothetical protein G (232)	213	53.5	0.00015
gi 44985944 gb AAS4555.1 AGR066Wp [Ashbya gossyp (1577)	229	57.2	7.7e-05	gi 134364163 gb EBA91033.1	hypothetical protein G (102)	208	52.3	0.00015
gi 137478171 gb EBU31918.1 hypothetical protein G (154)	215	53.8	7.8e-05	gi 140486597 gb ECJ97657.1	hypothetical protein G (74)	206	51.8	0.00015
gi 225214557 gb ACN83291.1 3-phosphoshikimate 1-c (420)	221	55.3	7.8e-05	gi 142393793 gb ECX74526.1	hypothetical protein G (238)	213	53.5	0.00015
gi 281108575 gb ADA52833.1 Sequence 8 from patent (520)	222	55.5	8.1e-05	gi 138285030 gb EC03219.1	hypothetical protein G (105)	208	52.3	0.00015
gi 111979102 gb ABH83339.1 Sequence 8 from patent (520)	222	55.5	8.1e-05	gi 143729176 gb EDG48487.1	hypothetical protein G (338)	215	54.0	0.00015
gi 138640927 gb ECA98853.1 hypothetical protein G (171)	215	53.9	8.5e-05	gi 135319190 gb EBG83853.1	hypothetical protein G (77)	206	51.8	0.00016
gi 143364680 gb EDE57647.1 hypothetical protein G (123)	213	53.4	8.5e-05	gi 135261549 gb EBG49250.1	hypothetical protein G (248)	213	53.5	0.00016
gi 143907468 gb EDH49131.1 hypothetical protein G (209)	216	54.1	8.8e-05	gi 148323442 gb EDK88692.1	3-phosphoshikimate 1-c (420)	216	54.2	0.00016
gi 138388666 gb EB232841.1 hypothetical protein G (127)	213	53.4	8.8e-05	gi 1279041801 gb AAO27013.1	3-phosphoshikimate 1-ca (427)	216	54.2	0.00016
gi 136692287 gb EBF77687.1 hypothetical protein G (273)	217	54.4	9.5e-05	gi 142582794 gb ECJ11702.1	hypothetical protein G (114)	208	52.3	0.00016
gi 141883580 gb ECT91843.1 hypothetical protein G (241)	216	54.1	9.9e-05	gi 138629390 gb ECJ92270.1	hypothetical protein G (99)	207	52.1	0.00017
gi 143881431 gb EDH30381.1 hypothetical protein G (107)	211	52.9	0.0001	gi 137761629 gb EBV85571.1	hypothetical protein G (278)	213	53.5	0.00017
gi 1255342376 gb ACU08489.1 5-Enolpyruvylshikimate (410)	219	54.9	0.0001	gi 138258529 gb EBY62640.1	hypothetical protein G (147)	209	52.6	0.00018
gi 143294031 gb EDE16453.1 hypothetical protein G (211)	215	53.9	0.0001	gi 116792410 gb ABK26355.1	unknown [Picea sitchens (148)	209	52.6	0.00018
gi 1349881530 gb EBE73942.1 hypothetical protein G (152)	213	53.4	0.0001	gi 1210064464 gb EEA18560.1	pentafunctional polype (1573)	223	56.0	0.00018
gi 135513466 gb EBI13124.1 hypothetical protein G (152)	213	53.4	0.0001	gi 1261497413 gb ACX83863.1	3-phosphoshikimate 1-c (416)	215	54.0	0.00018
gi 269095297 gb AC252528.1 3-phosphoshikimate 1-c (422)	219	54.9	0.0001	gi 238939610 emb CAR27785.1	ZYRO00D06578p [Zygosac (1589)	223	56.0	0.00018
gi 151858127 dbj BAD42285.1 UDP-N-acetylglucosamin (424)	219	54.9	0.0001	gi 141847271 gb ECF66592.1	hypothetical protein G (112)	207	52.1	0.00019
gi 113376729 gb AAZ79230.2 plastid 5-enolpyruvyls (437)	219	54.9	0.00011	gi 119537558 gb ABU82175.1	UDP-N-acetylglucosamin (508)	216	54.3	0.00019
gi 141329022 gb ECR07966.1 hypothetical protein G (161)	213	53.4	0.00011	gi 135733488 gb EBY50659.1	hypothetical protein G (160)	209	52.6	0.00019
gi 40557115 gb AAR87845.1 5-enolpyruvylshikimate- (445)	219	54.9	0.00011	gi 138609959 gb ECA78836.1	hypothetical protein G (115)	207	52.1	0.00019
gi 239795036 dbj BAH74025.1 3-phosphoshikimate 1- (445)	219	54.9	0.00011	gi 129605907 dbj BAC69971.1	putative UDP-N-acetylgl (437)	215	54.0	0.00019
gi 136028772 gb EBL43028.1 hypothetical protein G (143)	212	53.2	0.00011	gi 143365722 gb EDE58318.1	hypothetical protein G (375)	214	53.8	0.00019

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Final Report

Regulatory Product Characterization Center

REG-10-042

MSL002522

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gi 134077312 emb CAK45651.1 unnamed protein produ	(1031)	220	55.2	0.0002	gi 1256559742 gb ACU85589.1 UDP-N-acetylglucosamin	(517)	212	53.5	0.00034
gi 136116509 gb EBM02401.1 hypothetical protein G	(118)	207	52.1	0.0002	gi 135651046 gb EBI99695.1 hypothetical protein G	(117)	203	51.3	0.00035
gi 1213504184 emb CAS92803.1 unnamed protein produ	(435)	215	54.0	0.0002	gi 139191265 gb EC03543.1 hypothetical protein G	(166)	205	51.8	0.00035
gi 135659439 gb EBJ04885.1 hypothetical protein G	(127)	207	52.1	0.00021	gi 144194317 gb EDJ55692.1 hypothetical protein G	(232)	207	52.3	0.00035
gi 1432668167 gb EDE02421.1 hypothetical protein G	(77)	204	51.4	0.00021	gi 136950192 gb EBR36051.1 hypothetical protein G	(143)	204	51.5	0.00036
gi 138629391 gb EAC92271.1 hypothetical protein G	(91)	205	51.7	0.00021	gi 1343855993 gb EDH11923.1 hypothetical protein G	(648)	213	53.7	0.00036
gi 140771259 gb ECN39459.1 hypothetical protein G	(130)	207	52.1	0.00021	gi 119674666 gb ABJ88922.1 3-phosphoshikimate 1-c	(399)	210	53.0	0.00036
gi 137414679 gb EBT96858.1 hypothetical protein G	(154)	208	52.4	0.00021	gi 1197629303 gb EDY40847.1 3-phosphoshikimate 1-c	(403)	210	53.0	0.00037
gi 144092537 gb EDT181200.1 hypothetical protein G	(81)	204	51.4	0.00022	gi 133856458 gb EBK27748.1 hypothetical protein G	(110)	202	51.1	0.00038
gi 141892373 gb ECT97923.1 hypothetical protein G	(308)	212	53.3	0.00022	gi 116062764 dbj BAA80401.2 3-phosphoshikimate 1-	(419)	210	53.0	0.00038
gi 143335933 gb EDE40536.1 hypothetical protein G	(430)	214	53.8	0.00022	gi 135662774 gb EBT06959.1 hypothetical protein G	(303)	208	52.5	0.00038
gi 137589221 gb EBU91870.1 hypothetical protein G	(134)	207	52.1	0.00022	gi 167296094 gb ABZ48958.1 Sequence 22896 from pa	(427)	210	53.0	0.00039
gi 137848316 gb EBW34665.1 hypothetical protein G	(135)	207	52.1	0.00022	gi 137646588 gb EBV23065.1 hypothetical protein G	(224)	206	52.0	0.00039
gi 140413732 gb ECL59758.1 hypothetical protein G	(137)	207	52.1	0.00022	gi 16415784 emb CAO01095.1 5-enolpyruvylshikimate	(445)	210	53.0	0.0004
gi 167290545 gb ABZ43409.1 Sequence 17347 from pa	(447)	214	53.8	0.00023	gi 124850311 gb AAN63156.1 5-enolpyruvylshikimate-	(445)	210	53.0	0.0004
gi 10175334 dbj BAB06432.1 3-phosphoshikimate 1-c	(447)	214	53.8	0.00023	gi 156638357 gb AAW10629.1 Sequence 7 from patent	(445)	210	53.0	0.0004
gi 140672153 gb ECM71666.1 hypothetical protein G	(141)	207	52.2	0.00023	gi 137313646 gb EBT40020.1 hypothetical protein G	(140)	203	51.3	0.0004
gi 140810164 gb ECN66826.1 hypothetical protein G	(278)	211	53.1	0.00023	gi 137327459 gb EBT47689.1 hypothetical protein G	(143)	203	51.3	0.00041
gi 141798088 gb ECT34142.1 hypothetical protein G	(144)	207	52.2	0.00023	gi 12484168 gb AAB72304.1 I149197 Sequence 50 from p	(460)	210	53.0	0.00041
gi 141546046 gb ECS27575.1 hypothetical protein G	(124)	206	51.9	0.00024	gi 144974747 gb ABP12458.1 Sequence 50 from patent	(460)	210	53.0	0.00041
gi 138611211 gb ECA79728.1 hypothetical protein G	(286)	211	53.1	0.00024	gi 5957568 gb AAE08242.1 Sequence 50 from patent	(460)	210	53.0	0.00041
gi 139498756 gb ECF48543.1 hypothetical protein G	(64)	202	51.0	0.00024	gi 12485245 gb AAB73381.1 I144470 Sequence 50 from p	(460)	210	53.0	0.00041
gi 141992988 gb ECU68466.1 hypothetical protein G	(149)	207	52.2	0.00024	gi 143659900 gb EDG12514.1 hypothetical protein G	(64)	198	50.1	0.00042
gi 140455536 gb ECL87543.1 hypothetical protein G	(247)	210	52.9	0.00024	gi 139177681 gb ECJ93905.1 hypothetical protein G	(288)	207	52.3	0.00042
gi 140236368 gb ECK45224.1 hypothetical protein G	(154)	207	52.2	0.00025	gi 142857706 gb EDB07392.1 hypothetical protein G	(486)	210	53.0	0.00043
gi 17017471 gb ACB07794.1 3-phosphoshikimate 1-c	(423)	213	53.6	0.00025	gi 141954719 gb ECU41802.1 hypothetical protein G	(349)	208	52.5	0.00043
gi 140654303 gb ECM59089.1 hypothetical protein G	(112)	205	51.7	0.00025	gi 141580813 gb ECS45999.1 hypothetical protein G	(78)	199	50.4	0.00043
gi 142142776 gb EDV90405.1 hypothetical protein G	(138)	206	51.9	0.00026	gi 133866695 gb EDH19810.1 hypothetical protein G	(352)	208	52.5	0.00043
gi 143205281 gb EDD57686.1 hypothetical protein G	(140)	206	51.9	0.00026	gi 135343554 gb EBH00234.1 hypothetical protein G	(155)	203	51.3	0.00043
gi 140413370 gb ECL59501.1 hypothetical protein G	(231)	209	52.7	0.00026	gi 13092893 emb CAC30301.1 putative 3-phosphoshik	(430)	209	52.8	0.00045
gi 138878118 gb ECF26538.1 hypothetical protein G	(120)	205	51.7	0.00026	gi 1219932929 emb CAR70886.1 putative 3-phosphosh	(430)	209	52.8	0.00045
gi 143270309 gb EDE03964.1 hypothetical protein G	(408)	212	53.4	0.00028	gi 138437383 gb EBZ67000.1 hypothetical protein G	(221)	205	51.8	0.00045
gi 262181543 gb ACY29662.1 5-enolpyruvylshikimate	(248)	209	52.7	0.00028	gi 144034478 gb EDI39203.1 hypothetical protein G	(69)	198	50.1	0.00045
gi 143970801 gb EDH494315.1 hypothetical protein G	(110)	204	51.5	0.00028	gi 135913705 gb EBK66907.1 hypothetical protein G	(136)	202	51.1	0.00045
gi 136531748 gb EBG076792.1 hypothetical protein G	(185)	207	52.2	0.00029	gi 160707495 gb EAT91093.2 hypothetical protein S	(1661)	217	54.7	0.00045
gi 142893931 gb EDB33295.1 hypothetical protein G	(427)	212	53.4	0.00029	gi 136570079 gb EBB01271.1 hypothetical protein G	(195)	204	51.6	0.00046
gi 110729299 gb ABG88197.1 EPSP synthase [Phaseol	(522)	213	53.7	0.0003	gi 139968256 gb ECI70629.1 hypothetical protein G	(140)	202	51.1	0.00047
gi 119948400 gb ABM07311.1 3-Phosphoshikimate-1-c	(456)	212	53.4	0.00031	gi 135693637 gb EBJ25980.1 hypothetical protein G	(200)	204	51.6	0.00047
gi 142478397 gb ECY37505.1 hypothetical protein G	(63)	200	50.5	0.00031	gi 140473336 gb ECJ94304.1 hypothetical protein G	(75)	198	50.2	0.00048
gi 142582261 gb ECZ11328.1 hypothetical protein G	(104)	203	51.3	0.00031	gi 129339497 gb AAO77293.1 3-phosphoshikimate 1-ca	(410)	208	52.6	0.0005
gi 1593744 gb AAA55351.1 Sequence 3 from Patent EP	(469)	212	53.4	0.00031	gi 7019762 emb CAB75770.1 pentafunctional aromati	(1573)	216	54.5	0.0005
gi 137815071 gb EBV96275.1 hypothetical protein G	(206)	207	52.2	0.00032	gi 139125658 gb ECJ58797.1 hypothetical protein G	(181)	203	51.4	0.0005
gi 137013318 gb EBR71823.1 hypothetical protein G	(126)	204	51.5	0.00032	gi 76876364 emb CAI87586.1 UDP-N-acetylglucosamin	(419)	208	52.6	0.00051
gi 2485244 gb AAB73380.1 I144469 Sequence 49 from p	(480)	212	53.4	0.00032	gi 139101794 gb ECQ42558.1 hypothetical protein G	(132)	201	50.9	0.00051
gi 2484167 gb AAB72303.1 I149196 Sequence 49 from p	(480)	212	53.4	0.00032	gi 141179292 gb ECQ17891.1 hypothetical protein G	(112)	200	50.7	0.00051
gi 144974746 gb ABP12457.1 Sequence 49 from patent	(480)	212	53.4	0.00032	gi 1257472973 gb ACV51092.1 3-phosphoshikimate 1-c	(426)	208	52.6	0.00051
gi 5957567 gb AAE08241.1 Sequence 49 from patent	(480)	212	53.4	0.00032	gi 135589340 gb EBI61491.1 hypothetical protein G	(68)	197	49.9	0.00051
gi 229422320 gb EEQ37367.1 3-phosphoshikimate 1-c	(418)	211	53.2	0.00033	gi 1222843005 gb EEB80552.1 3-phosphoshikimate 1-c	(518)	209	52.8	0.00053
gi 142608246 gb EC229452.1 hypothetical protein G	(419)	211	53.2	0.00033	gi 143231890 gb EDD76949.1 hypothetical protein G	(398)	207	52.4	0.00056
gi 197053769 gb ACH25467.1 Sequence 19 from patent	(506)	212	53.4	0.00033	gi 136481378 gb EBQ44369.1 hypothetical protein G	(108)	199	50.4	0.00057
gi 136314634 gb EBN33187.1 hypothetical protein G	(514)	212	53.4	0.00034	gi 1238851221 gb EEQ40685.1 hypothetical protein C	(1568)	215	54.3	0.00058

gi 119397025 gb EAW07456.1	215	54.3	0.00058	pentafunctional polype	(1587)	215	54.3	0.00058	gi 139957028 gb ECI62785.1	hypothetical protein G	(95)	194	49.4	0.0011	
gi 114335818 gb ABW73200.1	419	207	52.4	0.00058	UDP-N-acetylglucosamin	(419)	207	52.4	0.00058	gi 138719578 gb ECB53769.1	hypothetical protein G	(137)	196	49.9	0.0011
gi 134719113 gb EBD01143.1	136	200	50.7	0.00061	hypothetical protein G	(136)	200	50.7	0.00061	gi 138838259 gb EC009709.1	hypothetical protein G	(99)	194	49.4	0.0011
gi 141537327 gb ECG21320.1	70	196	49.7	0.00061	hypothetical protein G	(70)	196	49.7	0.00061	gi 138404715 gb EBZ43876.1	hypothetical protein G	(229)	199	50.6	0.0011
gi 256686438 gb ECV09331.1	439	207	52.4	0.00061	UDP-N-acetylglucosamin	(439)	207	52.4	0.00061	gi 140235542 gb ECR44673.1	hypothetical protein G	(273)	200	50.8	0.0011
gi 141670245 gb ECG72593.1	275	204	51.7	0.00062	hypothetical protein G	(275)	204	51.7	0.00062	gi 139593930 gb ECG14149.1	hypothetical protein G	(141)	196	49.9	0.0011
gi 137252226 gb EBT05562.1	123	199	50.5	0.00064	hypothetical protein G	(123)	199	50.5	0.00064	gi 137153595 gb EB550236.1	hypothetical protein G	(103)	194	49.4	0.0011
gi 142456675 gb ECY21312.1	405	206	52.2	0.00065	hypothetical protein G	(405)	206	52.2	0.00065	gi 141970069 gb ECU552289.1	hypothetical protein G	(286)	200	50.8	0.0012
gi 144203151 gb EDU61880.1	108	198	50.2	0.00066	hypothetical protein G	(108)	198	50.2	0.00066	gi 138254743 gb EBY59922.1	hypothetical protein G	(90)	193	49.2	0.0012
gi 143081548 gb EDC67931.1	411	206	52.2	0.00066	hypothetical protein G	(411)	206	52.2	0.00066	gi 1220698176 gb EED54516.1	pentafunctional polype	(1578)	210	53.3	0.0012
gi 139902023 gb ECI24529.1	211	202	51.2	0.00066	hypothetical protein G	(211)	202	51.2	0.00066	gi 211586138 emb CAP93886.1	Pc16g12160 [Penicilli	(1586)	210	53.3	0.0012
gi 14197527 gb EAU39227.1	1581	214	54.1	0.00067	hypothetical protein A	(1581)	214	54.1	0.00067	gi 3834343 emb CAA28836.1	arom polypeptide [Emeri	(1586)	210	53.3	0.0012
gi 15113315 gb AAE68899.1	423	206	52.2	0.00068	Sequence 6 from patent	(423)	206	52.2	0.00068	gi 183770536 dbj BAE60669.1	unnamed protein produc	(1595)	210	53.3	0.0012
gi 143094736 gb EDC77565.1	306	204	51.7	0.00069	hypothetical protein G	(306)	204	51.7	0.00069	gi 137958190 gb EBW97170.1	hypothetical protein G	(111)	194	49.4	0.0012
gi 258554844 gb ACV77786.1	428	206	52.2	0.00069	3-phosphoshikimate 1-c	(428)	206	52.2	0.00069	gi 135657735 gb EBU903832.1	hypothetical protein G	(94)	193	49.2	0.0012
gi 140981503 gb ECO82557.1	237	202	51.2	0.00073	hypothetical protein G	(237)	202	51.2	0.00073	gi 140722456 gb ECN06632.1	hypothetical protein G	(157)	196	49.9	0.0012
gi 240135769 gb EBR35322.1	1551	213	53.9	0.00076	pentafunctional polype	(1551)	213	53.9	0.00076	gi 138452474 gb EBZ77315.1	hypothetical protein G	(157)	196	49.9	0.0012
gi 218675784 gb ACU00597.1	410	205	52.0	0.00076	5-enolpyruvylshikimate	(410)	205	52.0	0.00076	gi 141051574 gb ECR29929.1	hypothetical protein G	(158)	196	49.9	0.0012
gi 134759239 gb EBD23750.1	416	205	52.0	0.00077	hypothetical protein G	(416)	205	52.0	0.00077	gi 1257811704 gb EEV40524.1	UDP-N-acetylglucosamin	(430)	202	51.3	0.0012
gi 136574586 gb EBP04142.1	67	194	49.3	0.00078	hypothetical protein G	(67)	194	49.3	0.00078	gi 141916054 gb ECU14493.1	hypothetical protein G	(82)	192	48.9	0.0012
gi 136132486 gb EBW13199.1	256	202	51.2	0.00078	hypothetical protein G	(256)	202	51.2	0.00078	gi 135163783 gb EBF90152.1	hypothetical protein G	(165)	196	49.9	0.0013
gi 136333268 gb EBN45633.1	136	198	50.3	0.00081	hypothetical protein G	(136)	198	50.3	0.00081	gi 135099842 gb EBF49079.1	hypothetical protein G	(322)	200	50.9	0.0013
gi 140268788 gb ECK67789.1	137	198	50.3	0.00081	hypothetical protein G	(137)	198	50.3	0.00081	gi 136947037 gb EBR34275.1	hypothetical protein G	(143)	195	49.7	0.0013
gi 78220930 gb ABB40279.1	442	205	52.0	0.00082	3-phosphoshikimate 1-ca	(442)	205	52.0	0.00082	gi 18160470 gb AAL63821.1	3-phosphoshikimate 1-ca	(400)	201	51.1	0.0013
gi 190347323 gb EDK39572.2	1210	211	53.4	0.00082	hypothetical protein P	(1210)	211	53.4	0.00082	gi 1226289074 gb EEH44586.1	pentafunctional AROM p	(1538)	209	53.0	0.0013
gi 13895343 gb ECC56702.1	120	197	50.0	0.00084	hypothetical protein G	(120)	197	50.0	0.00084	gi 145304842 gb ABP55424.1	3-phosphoshikimate 1-c	(414)	201	51.1	0.0014
gi 136255249 gb EBW91262.1	143	198	50.3	0.00084	hypothetical protein G	(143)	198	50.3	0.00084	gi 189420145 gb ACD94543.1	UDP-N-acetylglucosamin	(419)	201	51.1	0.0014
gi 142257629 gb ECW77085.1	410	204	51.7	0.00088	hypothetical protein G	(410)	204	51.7	0.00088	gi 1257807952 gb EEV36774.1	UDP-N-acetylglucosamin	(430)	201	51.1	0.0014
gi 142876278 gb EDB20907.1	151	198	50.3	0.00088	hypothetical protein G	(151)	198	50.3	0.00088	gi 1257801515 gb EEV30445.1	UDP-N-acetylglucosamin	(430)	201	51.1	0.0014
gi 238842364 gb EEQ32026.1	1571	212	53.7	0.00089	pentafunctional AROM p	(1571)	212	53.7	0.00089	gi 169242594 emb CAM63622.1	3-phosphoshikimate 1-	(431)	201	51.1	0.0014
gi 157921240 gb ABW02667.1	414	204	51.7	0.00089	3-phosphoshikimate 1-c	(414)	204	51.7	0.00089	gi 142110315 gb ECV66589.1	hypothetical protein G	(366)	200	50.9	0.0014
gi 167274833 gb ABZ27697.1	1588	212	53.7	0.0009	Sequence 1635 from pat	(1588)	212	53.7	0.0009	gi 142201089 gb ECW34849.1	hypothetical protein G	(453)	201	51.1	0.0015
gi 3381 emb CAA29458.1	unnamed protein product [S	(1588)	212	53.7	0.0009	gi 142559146 gb ECY95199.1	hypothetical protein G	(146)	194	49.5	0.0015	0.0015			
gi 165659 emb CAA88208.1	AroIp [Saccharomyces cer	(1588)	212	53.7	0.0009	gi 1226281118 gb EEH36684.1	pentafunctional AROM p	(1523)	208	52.8	0.0015	0.0015			
gi 136136795 gb EBM15292.1	hypothetical protein G	(255)	201	51.0	0.0009	gi 140706516 gb ECM95928.1	hypothetical protein G	(65)	189	48.3	0.0016	0.0016			
gi 139197802 gb ECE08219.1	hypothetical protein G	(80)	194	49.3	0.00091	gi 263254749 gb EEZ26183.1	3-phosphoshikimate 1-c	(410)	200	50.9	0.0016	0.0016			
gi 171991199 gb ACB62121.1	UDP-N-acetylglucosamin	(434)	204	51.8	0.00093	gi 1225681904 gb EEH20188.1	pentafunctional AROM p	(1603)	208	52.8	0.0016	0.0016			
gi 135669319 gb EBJ11015.1	hypothetical protein G	(136)	197	50.1	0.00093	gi 136640296 gb EBP45062.1	hypothetical protein G	(132)	193	49.2	0.0016	0.0016			
gi 134562746 gb EBC08575.1	hypothetical protein G	(164)	198	50.3	0.00095	gi 134553252 gb EB02793.1	hypothetical protein G	(114)	192	49.0	0.0016	0.0016			
gi 143141346 gb EDD11677.1	hypothetical protein G	(100)	195	49.6	0.00095	gi 139664636 gb ECG62011.1	hypothetical protein G	(263)	197	50.2	0.0016	0.0016			
gi 136789549 gb EBQ41934.1	hypothetical protein G	(63)	192	48.9	0.00099	gi 141113012 gb ECP71634.1	hypothetical protein G	(83)	190	48.5	0.0017	0.0017			
gi 140376969 gb ECL35521.1	hypothetical protein G	(149)	197	50.1	0.001	gi 143868004 gb EDH20779.1	hypothetical protein G	(167)	194	49.5	0.0017	0.0017			
gi 142704948 gb ECZ98083.1	hypothetical protein G	(107)	195	49.6	0.001	gi 139379779 gb ECE71675.1	hypothetical protein G	(120)	192	49.0	0.0017	0.0017			
gi 136760213 gb EBQ22186.1	hypothetical protein G	(150)	197	50.1	0.001	gi 137964772 gb EBX00908.1	hypothetical protein G	(151)	193	49.3	0.0018	0.0018			
gi 229452487 gb EEO58278.1	3-phosphoshikimate 1-c	(409)	203	51.5	0.001	gi 142072287 gb ECV36024.1	hypothetical protein G	(419)	199	50.7	0.0018	0.0018			
gi 137954036 gb EBW94853.1	hypothetical protein G	(178)	198	50.3	0.001	gi 138687742 gb ECB31567.1	hypothetical protein G	(215)	195	49.7	0.0018	0.0018			
gi 135010860 gb EBE91396.1	hypothetical protein G	(93)	194	49.4	0.001	gi 135739268 gb EBY54246.1	hypothetical protein G	(131)	192	49.0	0.0019	0.0019			
gi 267983528 gb ACY83357.1	UDP-N-acetylglucosamin	(418)	203	51.5	0.001	gi 140653063 gb ECM58227.1	hypothetical protein G	(132)	192	49.0	0.0019	0.0019			
gi 143444815 gb EDE99481.1	hypothetical protein G	(419)	203	51.5	0.001	gi 1224465099 gb EEF81352.1	UDP-N-acetylglucosamin	(427)	199	50.7	0.0019	0.0019			
gi 137468274 gb EBU26710.1	hypothetical protein G	(131)	196	49.9	0.001	gi 140033355 gb ECU13975.1	hypothetical protein G	(98)	190	48.6	0.0019	0.0019			
gi 135347204 gb EBH02680.1	hypothetical protein G	(95)	194	49.4	0.0011	gi 139727823 gb ECH06066.1	hypothetical protein G	(163)	193	49.3	0.0019	0.0019			

gi 1242123418 gb ACS81114.1	3-phosphoshikimate 1-c	(444)	199	50.7	0.0019	gi 193089610 gb ACF14885.1	UDP-N-acetylglucosamin	(429)	195	49.9	0.0034
gi 138751797 gb ECB75063.1	hypothetical protein G	(273)	196	50.0	0.002	gi 1156612514 gb ABR05238.1	UDP-N-acetylglucosamin	(507)	196	50.1	0.0034
gi 138114114 gb EBX82134.1	hypothetical protein G	(144)	192	49.0	0.002	gi 115789082 gb ABU22152.1	Sequence 7120 from pat	(430)	195	49.9	0.0034
gi 134469016 gb EBE52900.1	hypothetical protein G	(74)	188	48.1	0.002	gi 143911586 gb EDH51981.1	hypothetical protein G	(261)	192	49.2	0.0034
gi 138198542 gb EBX35312.1	hypothetical protein G	(63)	187	47.8	0.002	gi 138307153 gb EDH90043.1	hypothetical protein G	(96)	186	47.7	0.0034
gi 129445205 gb EE050996.1	3-phosphoshikimate 1-c	(409)	198	50.5	0.0021	gi 139363992 gb ECB63192.1	hypothetical protein G	(82)	185	47.5	0.0034
gi 143462007 gb EDF10728.1	hypothetical protein G	(178)	193	49.3	0.0021	gi 135681712 gb EBJ18625.1	hypothetical protein G	(124)	187	48.0	0.0036
gi 126235555 gb EEZ04646.1	3-phosphoshikimate 1-c	(410)	198	50.5	0.0021	gi 150414167 gb EDN09532.1	3-dehydroquininate synth	(1538)	202	51.6	0.0037
gi 142562795 gb ECY97747.1	hypothetical protein G	(151)	192	49.1	0.0021	gi 143610523 gb EDF85316.1	hypothetical protein G	(419)	194	49.7	0.0038
gi 1241947714 gb EBS87996.1	3-phosphoshikimate 1-c	(412)	198	50.5	0.0021	gi 134382056 gb EBB03106.1	hypothetical protein G	(67)	183	47.0	0.0038
gi 149386230 gb ABN65979.2	predicted protein [Pic	(1571)	206	52.4	0.0021	gi 142888249 gb EDB25460.1	hypothetical protein G	(80)	184	47.3	0.0038
gi 190404911 gb EDV08178.1	3-dehydroquininate dehyd	(1588)	206	52.4	0.0021	gi 143644117 gb EDG03371.1	hypothetical protein G	(96)	185	47.5	0.0039
gi 1259145368 emb CAY78632.1	AroIp [Saccharomyces	(1588)	206	52.4	0.0021	gi 121561985 gb ACJ35040.1	UDP-N-acetylglucosamin	(439)	194	49.7	0.004
gi 143307135 gb EDE23454.1	hypothetical protein G	(419)	198	50.5	0.0021	gi 1239838602 gb ACS30399.1	UDP-N-acetylglucosamin	(442)	194	49.7	0.004
gi 143690268 gb EDG29963.1	hypothetical protein G	(256)	195	49.8	0.0021	gi 1375332653 gb EBU60183.1	hypothetical protein G	(140)	187	48.0	0.004
gi 134945150 gb EBE47064.1	hypothetical protein G	(133)	191	48.8	0.0022	gi 143224629 gb EDD71741.1	hypothetical protein G	(413)	193	49.5	0.0043
gi 135692503 gb EBJ25287.1	hypothetical protein G	(133)	191	48.8	0.0022	gi 137415456 gb EDB79288.1	hypothetical protein G	(255)	190	48.7	0.0044
gi 134454271 gb EBB44255.1	hypothetical protein G	(133)	191	48.8	0.0022	gi 1219953367 gb ACJ63751.1	UDP-N-acetylglucosamin	(422)	193	49.5	0.0044
gi 139589325 gb ECG10870.1	hypothetical protein G	(113)	190	48.6	0.0022	gi 136087910 gb EBU82913.1	hypothetical protein G	(134)	186	47.8	0.0045
gi 141588775 gb ECG48489.1	hypothetical protein G	(262)	195	49.8	0.0022	gi 140607099 gb ECM36325.1	hypothetical protein G	(136)	186	47.8	0.0045
gi 141118077 gb ECP75109.1	hypothetical protein G	(69)	187	47.9	0.0022	gi 134455209 gb EBB44828.1	hypothetical protein G	(137)	186	47.8	0.0046
gi 124227213 gb ECK35846.1	hypothetical protein G	(160)	192	49.1	0.0022	gi 137268607 gb EBT14833.1	hypothetical protein G	(269)	190	48.7	0.0046
gi 141303147 gb ECO94769.1	hypothetical protein G	(264)	195	49.8	0.0022	gi 1223512251 gb EEF23969.1	3-phosphoshikimate 1-c	(193)	188	48.3	0.0046
gi 134859754 gb EBD90063.1	hypothetical protein G	(62)	186	47.6	0.0023	gi 139030135 gb ECC92270.1	hypothetical protein G	(100)	184	47.3	0.0047
gi 126249231 gb ACR08322.1	3-phosphoshikimate 1-c	(403)	197	50.3	0.0024	gi 1429390731 gb ABR25383.1	5-enolpyruvylshikimate	(273)	190	48.8	0.0047
gi 123868104 gb ACR67815.1	UDP-N-acetylglucosamin	(413)	197	50.3	0.0024	gi 142495350 gb ECY49520.1	hypothetical protein G	(276)	190	48.8	0.0047
gi 239593894 gb EEQ76475.1	3-dehydroquininate synth	(1597)	205	52.2	0.0025	gi 137462153 gb EBU23533.1	hypothetical protein G	(120)	185	47.6	0.0047
gi 239607326 gb EEQ84223.1	3-dehydroquininate synth	(1597)	205	52.2	0.0025	gi 136139207 gb EBM16318.1	hypothetical protein G	(169)	187	48.0	0.0048
gi 136051312 gb EBL58189.1	hypothetical protein G	(370)	196	50.1	0.0026	gi 146152689 gb ABO03543.1	3-phosphoshikimate 1-c	(409)	192	49.2	0.005
gi 138684318 gb ECB29207.1	hypothetical protein G	(137)	190	48.6	0.0026	gi 167291322 gb ABZ44186.1	Sequence 18124 from pa	(410)	192	49.2	0.005
gi 143709062 gb EDG38906.1	hypothetical protein G	(376)	196	50.1	0.0026	gi 106394251 emb CAC11427.1	3-phosphoshikimate 1-c	(410)	192	49.2	0.005
gi 240250963 gb ACS47902.1	3-phosphoshikimate 1-c	(448)	197	50.3	0.0026	gi 141745506 gb ECT07595.1	hypothetical protein G	(128)	185	47.6	0.005
gi 240249395 gb ACS46335.1	3-phosphoshikimate 1-c	(448)	197	50.3	0.0026	gi 155262582 gb ABT18186.1	Sequence 105656 from p	(155)	186	47.8	0.0051
gi 139199645 gb ECE09358.1	hypothetical protein G	(322)	195	49.8	0.0026	gi 139689781 gb ECG79631.1	hypothetical protein G	(94)	183	47.1	0.0051
gi 219621611 gb ACI29768.1	3-phosphoshikimate 1-c	(462)	197	50.3	0.0027	gi 135390495 gb EBH31755.1	hypothetical protein G	(133)	185	47.6	0.0052
gi 139957153 gb ECT162875.1	hypothetical protein G	(203)	192	49.1	0.0027	gi 162953230 gb ABY22745.1	UDP-N-acetylglucosamin	(515)	193	49.5	0.0052
gi 1241993660 gb ACS75029.1	AroA [Methylophilus me	(126)	189	48.4	0.0028	gi 133692660 gb EBJ25383.1	hypothetical protein G	(140)	185	47.6	0.0054
gi 135364141 gb EBH14043.1	hypothetical protein G	(91)	187	47.9	0.0028	gi 139513765 gb ECF58913.1	hypothetical protein G	(124)	184	47.4	0.0056
gi 141272693 gb ECO81987.1	hypothetical protein G	(152)	190	48.6	0.0028	gi 134677879 gb EBG77000.1	hypothetical protein G	(243)	188	48.3	0.0056
gi 140905310 gb ECO29373.1	hypothetical protein G	(298)	194	49.6	0.0028	gi 138371238 gb EBJ221040.1	hypothetical protein G	(76)	181	46.6	0.0057
gi 240278751 gb EER42257.1	pentafunctional AROM p	(1595)	204	52.0	0.0029	gi 136629195 gb EBF38477.1	hypothetical protein G	(76)	181	46.6	0.0057
gi 225560322 gb EEH08604.1	pentafunctional AROM p	(1595)	204	52.0	0.0029	gi 134764306 gb EBD27211.1	hypothetical protein G	(246)	188	48.3	0.0057
gi 136292074 gb EBN17837.1	hypothetical protein G	(259)	193	49.4	0.0029	gi 156233981 dbj BAB67386.1	408aa long hypotheica	(408)	191	49.0	0.0057
gi 135540756 gb EBI30520.1	hypothetical protein G	(371)	195	49.9	0.003	gi 143133776 gb EDB06103.1	hypothetical protein G	(296)	189	48.6	0.0058
gi 141117651 gb ECP74806.1	hypothetical protein G	(267)	193	49.4	0.003	gi 157917592 gb ABY99019.1	3-phosphoshikimate 1-c	(414)	191	49.0	0.0058
gi 142827402 gb EDA88063.1	hypothetical protein G	(124)	188	48.2	0.0031	gi 143916751 gb EDH55551.1	hypothetical protein G	(418)	191	49.0	0.0058
gi 139013401 gb ECC80641.1	hypothetical protein G	(248)	192	49.1	0.0032	gi 138176813 gb EBY21560.1	hypothetical protein G	(79)	181	46.6	0.0058
gi 60491659 emb CAH06411.1	putative 3-phosphoshik	(410)	195	49.9	0.0032	gi 114338910 gb ABT69758.1	UDP-N-acetylglucosamin	(419)	191	49.0	0.0058
gi 1395933610 gb ACS58310.1	UDP-N-acetylglucosamin	(421)	195	49.9	0.0033	gi 140904032 gb ECO28502.1	hypothetical protein G	(135)	184	47.4	0.006
gi 153956243 gb AAV06240.1	Sequence 18197 from pat	(421)	195	49.9	0.0033	gi 13650904 gb EB057015.1	hypothetical protein G	(370)	190	48.8	0.0061
gi 196170661 gb ACG71634.1	UDP-N-acetylglucosamin	(422)	195	49.9	0.0033	gi 138544955 gb ECA33333.1	hypothetical protein G	(86)	181	46.7	0.0063

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gi 137393308 gb EBT84756.1	hypothetical protein G (335)	189	48.6	0.0064	gi 139487309 gb ECR41573.1	hypothetical protein G (98)	179	46.3	0.0094
gi 145284076 gb ABP51658.1	3-phosphoshikimate 1-c (398)	190	48.8	0.0065	gi 141885008 gb ECR92840.1	hypothetical protein G (192)	183	47.2	0.0094
gi 138700454 gb ECB40624.1	hypothetical protein G (105)	182	46.9	0.0065	gi 138764060 gb ECB78675.1	hypothetical protein G (117)	180	46.5	0.0095
gi 135215041 gb EBG21926.1	hypothetical protein G (76)	180	46.4	0.0065	gi 129834829 gb AAP05464.1	3-phosphoshikimate 1-ca (446)	188	48.4	0.0095
gi 142452999 gb ECY18640.1	hypothetical protein G (417)	190	48.8	0.0067	gi 162953604 gb ABY23119.1	3-phosphoshikimate 1-c (461)	188	48.4	0.0098
gi 893350991 dbj BAE84694.1	hypothetical protein l (419)	190	48.8	0.0068	gi 139188211 gb ECM01341.1	hypothetical protein G (63)	176	45.6	0.0099
gi 141433721 gb ECR79660.1	hypothetical protein G (80)	180	46.4	0.0068	gi 143745983 gb EDG56549.1	hypothetical protein G (150)	181	46.8	0.01
gi 135009318 gb EBE90352.1	hypothetical protein G (362)	189	48.6	0.0069	gi 151034541 gb AAE65693.1	Sequence 2 from patent (1551)	195	50.1	0.01
gi 197030981 gb ACH14982.1	Sequence 2 from patent (431)	190	48.8	0.0069	gi 120239787 gb AAE91809.1	Sequence 2 from patent (1551)	195	50.1	0.01
gi 207102478 emb CAR82017.1	unnamed protein produ (431)	190	48.8	0.0069	gi 143042478 gb EDG39310.1	hypothetical protein G (212)	183	47.2	0.01
gi 128086749 emb CAR03393.1	unnamed protein produ (431)	190	48.8	0.0069	gi 135121308 gb EBE62811.1	hypothetical protein G (296)	185	47.7	0.01
gi 213501391 emb CAS92774.1	unnamed protein produ (431)	190	48.8	0.0069	gi 140044594 gb ECU21510.1	hypothetical protein G (78)	177	45.8	0.01
gi 161726847 emb CAH47295.1	unnamed protein produ (431)	190	48.8	0.0069	gi 137218459 gb EBE86662.1	hypothetical protein G (109)	179	46.3	0.01
gi 151587625 emb CAH19218.1	3-phosphoshikimate 1-c (431)	190	48.8	0.0069	gi 192394696 gb ABE75971.1	UDP-N-acetylglucosamine (422)	187	48.2	0.01
gi 218301238 emb CAU98558.1	unnamed protein produ (431)	190	48.8	0.0069	gi 138140870 gb EBX97063.1	hypothetical protein G (136)	180	46.5	0.011
gi 213501389 emb CAS92773.1	unnamed protein produ (431)	190	48.8	0.0069	gi 139739266 gb ECH13970.1	hypothetical protein G (317)	185	47.7	0.011
gi 213501387 emb CAS92772.1	unnamed protein produ (431)	190	48.8	0.0069	gi 139770468 gb ECH34129.1	hypothetical protein G (121)	179	46.3	0.011
gi 197053752 gb ACH25450.1	Sequence 2 from patent (431)	190	48.8	0.0069	gi 136211954 gb EBM63337.1	hypothetical protein G (122)	179	46.3	0.011
gi 218012401 emb CAU98560.1	unnamed protein produ (431)	190	48.8	0.0069	gi 142166301 gb ECM08274.1	hypothetical protein G (400)	186	48.0	0.012
gi 270507581 gb ACZ85859.1	UDP-N-acetylglucosamin (438)	190	48.8	0.007	gi 142351900 gb ECX46155.1	hypothetical protein G (91)	177	45.0	0.012
gi 134462822 gb EBB52463.1	hypothetical protein G (70)	179	46.2	0.007	gi 256689084 gb ACV06886.1	5-enolpyruvylshikimate (348)	185	47.8	0.012
gi 142008762 gb EBD38366.1	hypothetical protein G (317)	188	48.4	0.0071	gi 140383974 gb ECU40532.1	hypothetical protein G (251)	183	47.3	0.012
gi 141808592 gb ECT39389.1	hypothetical protein G (117)	182	46.9	0.0071	gi 137419753 gb EBY99762.1	hypothetical protein G (111)	178	46.1	0.012
gi 138138563 gb EBX95779.1	hypothetical protein G (140)	183	47.2	0.0072	gi 135558520 gb EBT40613.1	hypothetical protein G (94)	177	45.8	0.012
gi 142331408 gb ECX31573.1	hypothetical protein G (324)	188	48.4	0.0072	gi 135320669 gb EBG84854.1	hypothetical protein G (132)	179	46.3	0.012
gi 136480862 gb EBO44034.1	hypothetical protein G (325)	188	48.4	0.0072	gi 139391913 gb ECR79640.1	hypothetical protein G (133)	179	46.3	0.012
gi 141983563 gb ECU61776.1	hypothetical protein G (64)	178	46.0	0.0075	gi 164120141 emb CAD00604.1	UDP-N-acetylglucosamin (430)	186	48.0	0.012
gi 142476987 gb ECY36457.1	hypothetical protein G (79)	183	47.2	0.0076	gi 116742768 emb CAH18192.1	murA-1 [Listeria welis (430)	186	48.0	0.012
gi 140208878 gb ECK26833.1	hypothetical protein G (149)	179	46.2	0.0078	gi 1217332641 gb ACK38435.1	UDP-N-acetylglucosamin (430)	186	48.0	0.012
gi 46914771 emb CAG21548.1	putative UDP-N-acetylgl (420)	189	48.6	0.0078	gi 16415206 emb CAC97896.1	UDP-N-acetylglucosamin (430)	186	48.0	0.012
gi 137740525 gb EBV74756.1	hypothetical protein G (133)	182	46.9	0.0079	gi 121702575 gb AAM75972.1	AF481102_8 5-enolpyruvyl (432)	186	48.0	0.012
gi 108461643 gb ABF86828.1	putative 3-phosphoshik (430)	189	48.6	0.008	gi 142637013 gb ECY24971.1	hypothetical protein G (369)	185	47.8	0.012
gi 139513224 gb ECF58553.1	hypothetical protein G (69)	178	46.0	0.008	gi 140808226 gb ECM65512.1	hypothetical protein G (136)	179	46.3	0.012
gi 134598959 gb EBC30184.1	hypothetical protein G (160)	183	47.2	0.0081	gi 140185524 gb ECK10449.1	hypothetical protein G (137)	179	46.3	0.013
gi 119947437 gb ABM06348.1	UDP-N-acetylglucosamin (441)	189	48.6	0.0082	gi 162148370 emb CAH64137.1	3-phosphoshikimate 1-c (445)	186	48.0	0.013
gi 143620960 gb EDF90404.1	hypothetical protein G (331)	187	48.2	0.0085	gi 260649506 emb CBG76262.1	UDP-N-acetylglucosami (448)	186	48.0	0.013
gi 212009244 gb ACU16626.1	5-enolpyruvylshikimate (402)	188	48.4	0.0087	gi 142928836 gb EDB58683.1	hypothetical protein G (322)	184	47.5	0.013
gi 135309098 gb ECG77172.1	hypothetical protein G (288)	186	47.9	0.0087	gi 522148951 dbj BAB47488.1	3-phosphoshikimate 1-c (410)	185	47.8	0.014
gi 256689097 gb ACV06899.1	3-phosphoshikimate 1-c (476)	189	48.7	0.0087	gi 138198137 gb EBX35030.1	hypothetical protein G (180)	180	46.6	0.014
gi 140624510 gb ECM41482.1	hypothetical protein G (76)	178	46.0	0.0087	gi 138285546 gb EBN13410.1	hypothetical protein G (153)	179	46.4	0.014
gi 143317823 gb EDE29836.1	hypothetical protein G (176)	183	47.2	0.0088	gi 190688437 gb ACB86115.1	UDP-N-acetylglucosamin (420)	185	47.8	0.014
gi 166853016 gb ABY91425.1	UDP-N-acetylglucosamin (416)	188	48.4	0.009	gi 139023559 gb ECC87682.1	hypothetical protein G (133)	178	46.1	0.014
gi 166857315 gb ABY95723.1	UDP-N-acetylglucosamin (416)	188	48.4	0.009	gi 140352867 gb ECI18954.1	hypothetical protein G (133)	178	46.1	0.014
gi 140284195 gb ECK74219.1	hypothetical protein G (110)	180	46.5	0.009	gi 139883257 gb ECM11584.1	hypothetical protein G (137)	178	46.1	0.014
gi 219540331 gb ACL22070.1	UDP-N-acetylglucosamin (419)	188	48.4	0.009	gi 162954008 gb ABY23523.1	UDP-N-acetylglucosamin (444)	185	47.8	0.015
gi 141432679 gb ECR78915.1	hypothetical protein G (67)	177	45.8	0.009	gi 178466894 dbj BAG21414.1	putative UDP-N-acetyl (446)	185	47.8	0.015
gi 167283017 gb ABF235881.1	Sequence 9819 from pat (420)	188	48.4	0.009	gi 134374036 gb EBA97727.1	hypothetical protein G (122)	177	45.9	0.015
gi 133915492 emb CAM05605.1	3-phosphoshikimate 1- (422)	188	48.4	0.0091	gi 142291045 gb ECX01581.1	hypothetical protein G (146)	178	46.1	0.015
gi 142953368 gb EDB77607.1	hypothetical protein G (95)	179	46.3	0.0091	gi 139501414 gb ECF50392.1	hypothetical protein G (285)	182	47.1	0.015
gi 144091022 gb EDT80155.1	hypothetical protein G (365)	187	48.2	0.0092	gi 134400389 gb EBB13277.1	hypothetical protein G (77)	174	45.2	0.016
gi 141648244 gb ECS65129.1	hypothetical protein G (97)	179	46.3	0.0093	gi 1441400806 gb EDI87031.1	hypothetical protein G (180)	179	46.4	0.016

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gi 169803576 gb ACA82194.1	UDP-N-acetylglucosamin	(428)	184	47.6	0.016	gi 125999056 gb ABN63131.1	UDP-N-acetylglucosamin	(419)	181	47.0	0.025
gi 141252115 gb ECO67624.1	hypothetical protein G	(117)	176	45.7	0.017	gi 160859372 gb ABX47906.1	UDP-N-acetylglucosamin	(419)	181	47.0	0.025
gi 145752901 gb AAO57246.1	putative 3-phosphohikimate	(272)	181	46.9	0.017	gi 121797045 gb ACK45238.1	UDP-N-acetylglucosamin	(419)	181	47.0	0.025
gi 140243474 gb ECK50349.1	hypothetical protein G	(166)	178	46.2	0.017	gi 171039444 gb AAZ19752.1	UDP-N-acetylglucosamine	(422)	181	47.0	0.025
gi 136904146 gb EBR14194.1	hypothetical protein G	(86)	174	45.2	0.017	gi 1562242424 gb ED0405052.1	predicted protein [Nem	(428)	181	47.0	0.025
gi 167831743 dbj BAG08659.1	3-phosphohikimate 1-	(401)	183	47.4	0.018	gi 122924501 dbj BAC08331.1	UDP-N-acetylglucosamin	(439)	181	47.0	0.026
gi 139978480 gb ECT77873.1	hypothetical protein G	(90)	174	45.2	0.018	gi 137543749 gb EBU66153.1	hypothetical protein G	(116)	173	45.1	0.026
gi 136287502 gb EBN14730.1	hypothetical protein G	(411)	183	47.4	0.018	gi 139395280 gb EC882035.1	hypothetical protein G	(271)	178	46.3	0.026
gi 1212555054 gb ACU27508.1	UDP-N-acetylglucosamin	(419)	183	47.4	0.019	gi 139360258 gb EC862143.1	hypothetical protein G	(235)	177	46.0	0.027
gi 144219177 gb EDU73294.1	hypothetical protein G	(182)	178	46.2	0.019	gi 136799044 gb EB048260.1	hypothetical protein G	(173)	175	45.5	0.027
gi 135232353 gb EBG86796.1	hypothetical protein G	(357)	182	47.1	0.019	gi 136046461 gb EBU54900.1	hypothetical protein G	(286)	178	46.3	0.027
gi 1219861261 gb ACU41603.1	transcriptional regula	(507)	184	47.6	0.019	gi 136179199 gb EBU41522.1	hypothetical protein G	(408)	180	46.8	0.028
gi 1269096834 gb ACZ21270.1	UDP-N-acetylglucosamin	(509)	184	47.6	0.019	gi 135420409 gb EBH51870.1	hypothetical protein G	(127)	173	45.1	0.028
gi 140931170 gb ECO47450.1	hypothetical protein G	(134)	176	45.7	0.019	gi 1228012361 gb ACR48122.1	3-phosphohikimate 1-c	(414)	180	46.8	0.028
gi 135441282 gb EBH65877.1	hypothetical protein G	(136)	176	45.7	0.019	gi 143724011 gb EDG45785.1	hypothetical protein G	(414)	180	46.8	0.028
gi 134720968 gb EBD02202.1	hypothetical protein G	(192)	178	46.2	0.019	gi 1228020375 gb ACF55782.1	3-phosphohikimate 1-c	(414)	180	46.8	0.028
gi 140343210 gb ECL12004.1	hypothetical protein G	(141)	176	45.7	0.02	gi 1227457241 gb ACF35928.1	3-phosphohikimate 1-c	(414)	180	46.8	0.028
gi 135487227 gb EBH96246.1	hypothetical protein G	(283)	180	46.7	0.02	gi 1228010404 gb ACF46166.1	3-phosphohikimate 1-c	(414)	180	46.8	0.028
gi 138559547 gb ECA42856.1	hypothetical protein G	(124)	175	45.5	0.02	gi 138081133 gb EBX63740.1	hypothetical protein G	(130)	173	45.1	0.028
gi 143907330 gb EDH49031.1	hypothetical protein G	(338)	181	46.9	0.021	gi 143904828 gb EDH47285.1	hypothetical protein G	(302)	178	46.3	0.029
gi 137616702 gb EBV07380.1	hypothetical protein G	(147)	176	45.7	0.021	gi 135357609 gb EBN62230.1	hypothetical protein G	(303)	178	46.3	0.029
gi 143566017 gb EDF66785.1	hypothetical protein G	(76)	172	44.8	0.021	gi 139601152 gb ECG19101.1	hypothetical protein G	(308)	178	46.3	0.029
gi 141831273 gb ECT55098.1	hypothetical protein G	(149)	176	45.7	0.021	gi 146881970 gb AAT05264.1	UDP-N-acetylglucosamine	(430)	180	46.8	0.029
gi 139190332 gb ECB02882.1	hypothetical protein G	(108)	174	45.2	0.021	gi 1225877536 emb CAS06250.1	Putative UDP-N-acetyl	(430)	180	46.8	0.029
gi 142857642 gb EDB07334.1	hypothetical protein G	(128)	175	45.5	0.021	gi 139819050 gb ECH68273.1	hypothetical protein G	(96)	171	44.6	0.029
gi 138134521 gb AAK40646.1	3-phosphohikimate 1-ca	(414)	182	47.2	0.021	gi 177841144 gb ACB75396.1	3-phosphohikimate 1-c	(431)	180	46.8	0.029
gi 261601917 gb ACX91520.1	3-phosphohikimate 1-c	(414)	182	47.2	0.021	gi 140119616 gb ECU67272.1	hypothetical protein G	(222)	176	45.8	0.029
gi 119768707 gb ABN01278.1	UDP-N-acetylglucosamin	(418)	182	47.2	0.021	gi 140328259 gb ECU1562.1	hypothetical protein G	(98)	171	44.6	0.03
gi 1238549023 dbj BAH65374.1	UDP-N-acetylglucosami	(419)	182	47.2	0.021	gi 1269302841 gb ACZ32941.1	3-phosphohikimate 1-c	(445)	180	46.8	0.03
gi 118567546 gb ABL02351.1	UDP-N-acetylglucosamin	(419)	182	47.2	0.021	gi 4377372 gb AAD19176.1	Phosphohikimate Vinyltr	(445)	180	46.8	0.03
gi 150956962 gb ABR78992.1	UDP-N-acetylglucosamin	(419)	182	47.2	0.021	gi 18163504 gb AAF37706.1	3-phosphohikimate 1-ca	(445)	180	46.8	0.03
gi 134397864 gb AAQ66925.1	3-phosphohikimate 1-ca	(419)	182	47.2	0.021	gi 33236921 gb AAP99008.1	3-phosphohikimate 1-ca	(445)	180	46.8	0.03
gi 40111601 gb AAR53881.1	Sequence 13598 from pat	(423)	182	47.2	0.022	gi 18979412 dbj BAA99246.1	phosphohikimate vinylt	(445)	180	46.8	0.03
gi 141223561 gb ECQ47426.1	hypothetical protein G	(95)	173	45.0	0.022	gi 156660946 gb AAW16305.1	Sequence 1040 from pate	(449)	180	46.8	0.03
gi 1226098022 dbj BAH46464.1	UDP-N-acetylglucosami	(427)	182	47.2	0.022	gi 140340029 gb ECU09712.1	hypothetical protein G	(120)	172	44.8	0.031
gi 28410485 emb CAD66871.1	3-phosphohikimate 1-c	(443)	182	47.2	0.022	gi 144212288 gb EDJ68348.1	hypothetical protein G	(331)	178	46.3	0.031
gi 189331472 dbj BAE81065.1	3-phosphohikimate 1-c	(445)	182	47.2	0.023	gi 137616572 gb EBV07310.1	hypothetical protein G	(122)	172	44.9	0.031
gi 136096902 gb EBL89017.1	hypothetical protein G	(102)	173	45.0	0.023	gi 136907629 gb EBR15450.1	hypothetical protein G	(281)	177	46.1	0.031
gi 136707484 gb EBB7611.1	hypothetical protein G	(204)	177	46.0	0.024	gi 142380263 gb ECX65159.1	hypothetical protein G	(395)	179	46.5	0.031
gi 141686809 gb ECS81156.1	hypothetical protein G	(124)	174	45.3	0.024	gi 138829636 gb ECU05571.1	hypothetical protein G	(128)	172	44.9	0.032
gi 141795829 gb ECT33174.1	hypothetical protein G	(288)	179	46.5	0.024	gi 137192869 gb EBST7215.1	hypothetical protein G	(128)	172	44.9	0.032
gi 134478916 gb EBB58719.1	hypothetical protein G	(90)	172	44.8	0.024	gi 1211999671 gb EEB05331.1	pentafunctional AROM p	(1584)	187	48.5	0.033
gi 137037050 gb EBR85370.1	hypothetical protein G	(126)	174	45.3	0.024	gi 160429271 gb ABX42834.1	UDP-N-acetylglucosamin	(418)	179	46.6	0.033
gi 142237788 gb ECW57166.1	hypothetical protein G	(409)	181	47.0	0.024	gi 142237180 gb ECW61959.1	hypothetical protein G	(418)	179	46.6	0.033
gi 143314137 gb EDB27504.1	hypothetical protein G	(210)	177	46.0	0.024	gi 145563522 gb ABP74457.1	UDP-N-acetylglucosamin	(419)	179	46.6	0.033
gi 128476576 gb AAO44664.1	3-phosphohikimate 1-ca	(486)	182	47.2	0.024	gi 120560331 gb ABM26258.1	UDP-N-acetylglucosamin	(419)	179	46.6	0.033
gi 136031855 gb EBL45103.1	hypothetical protein G	(414)	181	47.0	0.024	gi 145692283 gb ABP92788.1	UDP-N-acetylglucosamin	(423)	179	46.6	0.033
gi 247541801 gb ACS98819.1	UDP-N-acetylglucosamin	(417)	181	47.0	0.025	gi 145690079 gb ABP90585.1	UDP-N-acetylglucosamin	(423)	179	46.6	0.033
gi 134051246 gb ABO49217.1	UDP-N-acetylglucosamin	(417)	181	47.0	0.025	gi 155739074 gb AAV62715.1	UDP-N-acetylglucosamine	(428)	179	46.6	0.034
gi 142013385 gb ECU83405.1	hypothetical protein G	(418)	181	47.0	0.025	gi 167292185 gb ABZ45049.1	Sequence 18987 from pa	(373)	178	46.3	0.034
gi 151363855 gb ABS06855.1	UDP-N-acetylglucosamin	(419)	181	47.0	0.025	gi 140454168 gb ECU86667.1	hypothetical protein G	(321)	177	46.1	0.035

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gi 135507526 gb EBI09289.1	hypothetical protein G (272)	176 45.8	0.035	gi 140724657 gb ECN08179.1	hypothetical protein G (102)	168 44.0	0.047
gi 31710845 gb AAP67810.1	Sequence 1114 from pate (449)	179 46.6	0.035	gi 142027336 gb ECU96678.1	hypothetical protein G (87)	167 43.7	0.048
gi 128101268 gb ADA07818.1	Sequence 1114 from pat (449)	179 46.6	0.035	gi 144079806 gb EDI72256.1	hypothetical protein G (87)	167 43.7	0.048
gi 115825398 gb ABU37297.1	Sequence 1114 from pat (449)	179 46.6	0.035	gi 142253022 gb ECW73688.1	hypothetical protein G (284)	174 45.4	0.048
gi 139146809 gb ECD72295.1	hypothetical protein G (76)	168 43.9	0.037	gi 141310784 gb ECQ97443.1	hypothetical protein G (66)	165 43.3	0.05
gi 144974734 gb ABP12445.1	Sequence 18 from paten (28)	162 42.5	0.037	gi 136683126 gb EBP71689.1	hypothetical protein G (351)	175 45.7	0.05
gi 12484155 gb AAB72291.1	Sequence 18 from p (28)	162 42.5	0.037	gi 166856063 gb ABY9471.1	UDP-N-acetylglucosamine (417)	176 45.9	0.051
gi 15957555 gb AAE08229.1	Sequence 18 from patent (28)	162 42.5	0.037	gi 150903501 gb AAT87216.1	UDP-N-acetylglucosamine (419)	176 45.9	0.051
gi 12485232 gb AAB73368.1	Sequence 18 from p (28)	162 42.5	0.037	gi 122333863 gb AAM99730.1	AE014230_10 UDP-N-acetyl (419)	176 45.9	0.051
gi 152206293 gb ABS30603.1	3-phosphoshikimate 1-c (413)	178 46.3	0.038	gi 76562914 gb ABA45498.1	UDP-N-acetylglucosamine (419)	176 45.9	0.051
gi 127459852 gb ACF38538.1	3-phosphoshikimate 1-c (414)	178 46.3	0.038	gi 195974521 gb ACG62047.1	UDP-N-acetylglucosamine (419)	176 45.9	0.051
gi 1238381356 gb ACR42444.1	3-phosphoshikimate 1-c (414)	178 46.3	0.038	gi 19748524 gb AAL97966.1	putative UDP-N-acetylgl (419)	176 45.9	0.051
gi 136384109 gb EBM80400.1	hypothetical protein G (415)	178 46.3	0.038	gi 158141998 gb ABW20310.1	UDP-N-acetylglucosamin (420)	176 45.9	0.051
gi 138671508 gb ECB20195.1	hypothetical protein G (130)	171 44.7	0.038	gi 1229430270 gb EE040482.1	UDP-N-acetylglucosamin (423)	176 45.9	0.051
gi 1206568657 gb ACT10433.1	UDP-N-acetylglucosamin (419)	178 46.3	0.038	gi 143182820 gb EDD41234.1	hypothetical protein G (133)	169 44.2	0.052
gi 125702160 emb CAM9858.1	UDP-N-acetylglucosami (419)	178 46.3	0.038	gi 1257804381 gb EEY33203.1	UDP-N-acetylglucosamin (429)	176 45.9	0.052
gi 1367171835 gb EBM36678.1	hypothetical protein G (422)	178 46.3	0.038	gi 142018338 gb ECU88169.1	hypothetical protein G (158)	170 44.5	0.052
gi 55737161 gb AAV60803.1	UDP-N-acetylglucosamine (428)	178 46.3	0.039	gi 140874660 gb ECO09587.1	hypothetical protein G (115)	168 44.0	0.053
gi 140180092 gb ECK06544.1	hypothetical protein G (69)	167 43.7	0.039	gi 136049666 gb EBU57068.1	hypothetical protein G (314)	174 45.5	0.053
gi 13869474 gb ECB39929.1	hypothetical protein G (98)	169 44.2	0.04	gi 143126581 gb EDD00824.1	hypothetical protein G (191)	171 44.7	0.053
gi 139143879 gb ECD70262.1	hypothetical protein G (192)	173 45.2	0.04	gi 138343862 gb EBI10558.1	hypothetical protein G (83)	166 43.5	0.053
gi 156567059 gb ABU82464.1	3-phosphoshikimate 1-c (443)	178 46.4	0.04	gi 136459335 gb EDB03011.1	hypothetical protein G (228)	172 45.0	0.053
gi 136634440 gb EBF41579.1	hypothetical protein G (86)	168 44.0	0.041	gi 143906361 gb EDH48335.1	hypothetical protein G (117)	168 44.0	0.053
gi 136363919 gb EBN66534.1	hypothetical protein G (73)	167 43.7	0.041	gi 137151382 gb EB549008.1	hypothetical protein G (164)	170 44.5	0.054
gi 140723067 gb ECN07820.1	hypothetical protein G (124)	170 44.4	0.042	gi 140838038 gb ECN85962.1	hypothetical protein G (101)	167 43.8	0.054
gi 136476208 gb EB041023.1	hypothetical protein G (243)	174 45.4	0.042	gi 138582552 gb ECS9501.1	hypothetical protein G (248)	172 45.0	0.057
gi 137127351 gb EBS35626.1	hypothetical protein G (106)	169 44.2	0.042	gi 125404508 gb ACG61301.1	UDP-N-acetylglucosamin (426)	175 45.7	0.059
gi 143151259 gb EDD18893.1	hypothetical protein G (92)	168 44.0	0.043	gi 128270230 emb CAD63131.1	UDP-N-acetylglucosamin (426)	175 45.7	0.059
gi 251819535 emb CAZ56366.1	UDP-N-acetylglucosami (419)	177 46.1	0.044	gi 1256994553 gb EEU81855.1	UDP-N-acetylglucosamin (430)	175 45.7	0.06
gi 251816600 emb CAZ52238.1	UDP-N-acetylglucosami (419)	177 46.1	0.044	gi 1256952732 gb EEU69364.1	UDP-N-acetylglucosamin (430)	175 45.7	0.06
gi 71802859 gb AA72212.1	UDP-N-acetylglucosamine (419)	177 46.1	0.044	gi 1256998392 gb EEU84912.1	UDP-N-acetylglucosamin (430)	175 45.7	0.06
gi 71853702 gb AA251725.1	UDP-N-acetylglucosamine (419)	177 46.1	0.044	gi 1257160824 gb EEU90784.1	UDP-N-acetylglucosamin (430)	175 45.7	0.06
gi 128810988 dbj IBAC63922.1	putative UDP-N-acetylgl (419)	177 46.1	0.044	gi 1256986010 gb EEU73312.1	UDP-N-acetylglucosamin (430)	175 45.7	0.06
gi 143565502 gb EDF66515.1	hypothetical protein G (419)	177 46.1	0.044	gi 1256993601 gb EEU80903.1	UDP-N-acetylglucosamin (430)	175 45.7	0.06
gi 94546174 gb ABF36221.1	UDP-N-acetylglucosamine (419)	177 46.1	0.044	gi 12565998280 gb EEU17456.1	UDP-N-acetylglucosamin (430)	175 45.7	0.06
gi 194544194 gb ABF34242.1	UDP-N-acetylglucosamine (419)	177 46.1	0.044	gi 129343206 gb AAO80969.1	UDP-N-acetylglucosamine (430)	175 45.7	0.06
gi 1209540799 gb ACT161375.1	UDP-N-acetylglucosamin (419)	177 46.1	0.044	gi 1256949162 gb EEU65794.1	UDP-N-acetylglucosamin (430)	175 45.7	0.06
gi 136224671 gb AAK34186.1	putative UDP-N-acetylgl (419)	177 46.1	0.044	gi 1255969024 gb EEU99646.1	UDP-N-acetylglucosamin (430)	175 45.7	0.06
gi 1251820383 emb CAR46971.1	UDP-N-acetylglucosami (419)	177 46.1	0.044	gi 1255964127 gb EEU96603.1	UDP-N-acetylglucosamin (430)	175 45.7	0.06
gi 134271847 emb CAM30082.1	UDP-N-acetylglucosami (423)	177 46.1	0.044	gi 1256683428 gb EEU23123.1	UDP-N-acetylglucosamin (430)	175 45.7	0.06
gi 242391406 dbj BAH81865.1	UDP-N-acetylglucosami (419)	177 46.1	0.044	gi 1257164739 gb EEU94699.1	UDP-N-acetylglucosamin (430)	175 45.7	0.06
gi 194542289 gb ABF32338.1	UDP-N-acetylglucosamine (419)	177 46.1	0.044	gi 1256990899 gb EEU78201.1	UDP-N-acetylglucosamin (430)	175 45.7	0.06
gi 142787608 gb EDA58191.1	hypothetical protein G (355)	176 45.9	0.044	gi 125695926 gb EEU72558.1	UDP-N-acetylglucosamin (430)	175 45.7	0.06
gi 108465795 gb ABF90980.1	UDP-N-acetylglucosamin (420)	177 46.1	0.044	gi 1257157615 gb EEU87575.1	UDP-N-acetylglucosamin (430)	175 45.7	0.06
gi 14517938 gb AAK64441.1	ARF377339_2 UDP-GlcNAc 1- (420)	177 46.1	0.044	gi 141085359 gb ECF52162.1	hypothetical protein G (69)	164 43.1	0.06
gi 116101170 gb ABU66316.1	UDP-N-acetylglucosamin (423)	177 46.1	0.044	gi 142265664 gb ECW83009.1	hypothetical protein G (189)	170 44.5	0.061
gi 140152195 gb ECU87113.1	hypothetical protein G (134)	170 44.5	0.045	gi 139799833 gb ECH54842.1	hypothetical protein G (84)	165 43.3	0.062
gi 116099232 gb ABU64381.1	UDP-N-acetylglucosamin (435)	177 46.1	0.045	gi 197710518 gb EDY54552.1	UDP-N-acetylglucosamin (448)	175 45.7	0.062
gi 136121233 gb EBM05633.1	hypothetical protein G (371)	176 45.9	0.046	gi 138633487 gb ECA94615.1	hypothetical protein G (119)	167 43.8	0.063
gi 137081208 gb EBS10031.1	hypothetical protein G (71)	166 43.5	0.046	gi 143127849 gb EDD01758.1	hypothetical protein G (282)	172 45.0	0.064

gi 143636058 gb EDF98692.1	hypothetical protein G (75)	164 43.1	0.065	gi 262261230 gb EEY79929.1	UDP-N-acetylglucosamin (420)	171 44.9	0.1
gi 140891397 gb ECC021011.1	hypothetical protein G (289)	172 45.0	0.066	gi 135254630 gb EBG45208.1	hypothetical protein G (422)	171 44.9	0.1
gi 141883049 gb ECT91469.1	hypothetical protein G (77)	164 43.1	0.066	gi 143832894 gb EDG95261.1	hypothetical protein G (258)	168 44.2	0.11
gi 136971600 gb EBR48170.1	hypothetical protein G (128)	167 43.8	0.067	gi 1257473601 gb ACV51720.1	UDP-N-acetylglucosamin (427)	171 44.9	0.11
gi 136511372 gb EBO63787.1	hypothetical protein G (214)	170 44.5	0.067	gi 138120911 gb EBX85976.1	hypothetical protein G (260)	168 44.2	0.11
gi 123059295 emb CAC46505.1	Unknown [Streptococcus (419)	174 45.5	0.068	gi 1140673198 gb ECM72414.1	hypothetical protein G (70)	160 42.2	0.11
gi 138595418 dbj BAG34393.1	putative 3-phosphosh (419)	174 45.5	0.068	gi 142168248 gb ECW97775.1	hypothetical protein G (449)	171 44.9	0.11
gi 142134144 gb ECV844003.1	hypothetical protein G (215)	170 44.5	0.068	gi 135597220 gb EBI66356.1	hypothetical protein G (119)	163 43.0	0.11
gi 135591094 gb EBI62571.1	hypothetical protein G (69)	163 42.9	0.07	gi 137253093 gb EBI06079.1	hypothetical protein G (119)	163 43.0	0.11
gi 159746623 gb AAW71135.1	Sequence 14698 from pat (263)	171 44.8	0.07	gi 135113525 gb EBF57833.1	hypothetical protein G (454)	171 44.9	0.11
gi 143298282 gb EDE18600.1	hypothetical protein G (268)	171 44.8	0.071	gi 135111290 gb EBF56415.1	hypothetical protein G (454)	171 44.9	0.11
gi 137829606 gb EBW23918.1	hypothetical protein G (99)	165 43.4	0.071	gi 135096128 gb EBF46697.1	hypothetical protein G (454)	171 44.9	0.11
gi 140437930 gb ECL75035.1	hypothetical protein G (194)	169 44.3	0.072	gi 139811437 gb ECH63105.1	hypothetical protein G (62)	159 42.0	0.11
gi 6911979 emb CAB72195.1	UDP-N-acetylglucosamine (448)	174 45.5	0.072	gi 142898535 gb EDS36622.1	hypothetical protein G (287)	168 44.2	0.12
gi 140438989 gb ECL75771.1	hypothetical protein G (121)	166 43.6	0.073	gi 137104776 gb EBS22894.1	hypothetical protein G (250)	167 44.0	0.12
gi 138970500 gb ECC64000.1	hypothetical protein G (240)	170 44.6	0.074	gi 166854871 gb ABY93280.1	UDP-N-acetylglucosamin (417)	170 44.7	0.12
gi 137693394 gb EBV49130.1	hypothetical protein G (125)	166 43.6	0.075	gi 128029421 gb AAK08125.1	UDP-N-acetylglucosamine (357)	169 44.4	0.12
gi 139370234 gb ECB65074.1	hypothetical protein G (106)	165 43.4	0.076	gi 135046225 gb EBI14853.1	hypothetical protein G (257)	167 44.0	0.12
gi 138887694 gb ECL75035.1	hypothetical protein G (130)	166 43.6	0.078	gi 1212549346 dbj BAG80414.1	3-phosphoshikimate 1- (426)	170 44.7	0.12
gi 94548110 gb ABF38156.1	UDP-N-acetylglucosamine (419)	173 45.3	0.078	gi 256711277 gb EEU26315.1	UDP-N-acetylglucosamin (430)	170 44.7	0.12
gi 139375434 gb ECB68885.1	hypothetical protein G (67)	162 42.7	0.078	gi 142973737 gb EDS90282.1	hypothetical protein G (96)	161 42.5	0.12
gi 138926726 gb ECC45302.1	hypothetical protein G (133)	166 43.6	0.08	gi 142861353 gb EDB10051.1	hypothetical protein G (432)	170 44.7	0.12
gi 135734076 gb EBJ51018.1	hypothetical protein G (134)	166 43.6	0.08	gi 136573786 gb EBP03634.1	hypothetical protein G (222)	166 43.7	0.12
gi 135669959 gb EBJ11406.1	hypothetical protein G (159)	167 43.9	0.08	gi 141827987 gb ECT52798.1	hypothetical protein G (135)	163 43.0	0.12
gi 139132736 gb ECD62598.1	hypothetical protein G (82)	163 42.9	0.081	gi 1398139051 gb ECH68274.1	hypothetical protein G (70)	159 42.0	0.13
gi 136277271 gb EBN07840.1	hypothetical protein G (265)	170 44.6	0.081	gi 142725044 gb EDA12427.1	hypothetical protein G (83)	160 42.3	0.13
gi 144009555 gb EDI21805.1	hypothetical protein G (316)	171 44.8	0.082	gi 29608787 dbj BAC72840.1	putative UDP-N-acetylgl (448)	170 44.7	0.13
gi 134957415 gb EBE55225.1	hypothetical protein G (102)	164 43.2	0.084	gi 134464232 gb EBU83505.1	hypothetical protein G (118)	162 42.8	0.13
gi 55420321 gb AAV52046.1	AroA [Haemophilus parax (329)	171 44.8	0.085	gi 137574225 gb EBU83505.1	hypothetical protein G (119)	162 42.8	0.13
gi 134462559 gb EBB49152.1	hypothetical protein G (122)	165 43.4	0.085	gi 142158366 gb ECW02190.1	hypothetical protein G (454)	170 44.7	0.13
gi 141833611 gb ECT56782.1	hypothetical protein G (104)	164 43.2	0.086	gi 1554203251 gb AAV52048.1	hypothetical protein G (338)	168 44.2	0.13
gi 196191655 gb EDX86619.1	UDP-N-acetylglucosamin (477)	173 45.3	0.087	gi 140788486 gb ECN51392.1	hypothetical protein G (106)	161 42.5	0.13
gi 135188539 gb EBG06001.1	hypothetical protein G (342)	171 44.8	0.088	gi 219047701 gb AAM79640.1	putative UDP-N-acetylgl (404)	169 44.5	0.13
gi 142718885 gb EDA08059.1	hypothetical protein G (417)	172 45.1	0.09	gi 1391116258 gb ECJ52455.1	hypothetical protein G (127)	162 42.8	0.14
gi 135059368 gb EBF23231.1	hypothetical protein G (364)	171 44.9	0.092	gi 268625593 gb EEZ57993.1	UDP-N-acetylglucosamin (417)	169 44.5	0.14
gi 139434090 gb ECF08739.1	hypothetical protein G (96)	163 42.9	0.093	gi 268584379 gb EEZ49055.1	UDP-N-acetylglucosamin (417)	169 44.5	0.14
gi 236714009 gb EEU28997.1	UDP-N-acetylglucosamin (432)	172 45.1	0.093	gi 268586619 gb EEZ51295.1	UDP-N-acetylglucosamin (417)	169 44.5	0.14
gi 144018211 gb EDI27781.1	hypothetical protein G (324)	170 44.6	0.096	gi 193935115 gb ACF30939.1	putative UDP-N-acetylgl (417)	169 44.5	0.14
gi 138650547 gb ECB05452.1	hypothetical protein G (168)	166 43.7	0.097	gi 1228512474 gb EEH61819.1	UDP-N-acetylglucosamin (417)	169 44.5	0.14
gi 134737951 gb EBD11912.1	hypothetical protein G (235)	168 44.2	0.098	gi 268551781 gb EEZ46800.1	UDP-N-acetylglucosamin (417)	169 44.5	0.14
gi 134595715 gb EBC28324.1	hypothetical protein G (278)	169 44.4	0.098	gi 228228929 gb ACP86594.1	Sequence 8450 from pat (417)	169 44.5	0.14
gi 135179486 gb EBG00241.1	hypothetical protein G (330)	170 44.6	0.098	gi 268621293 gb EEZ53693.1	UDP-N-acetylglucosamin (417)	169 44.5	0.14
gi 137174025 gb EBS61743.1	hypothetical protein G (103)	163 42.9	0.098	gi 268588887 gb EEZ53563.1	UDP-N-acetylglucosamin (417)	169 44.5	0.14
gi 141041491 gb ECP22985.1	hypothetical protein G (104)	163 43.0	0.099	gi 268549193 gb EEZ44611.1	UDP-N-acetylglucosamin (417)	169 44.5	0.14
gi 134600428 gb EBC31021.1	hypothetical protein G (242)	168 44.2	0.1	gi 140395645 gb ECJ448452.1	hypothetical protein G (79)	159 42.1	0.14
gi 142831308 gb EDA91032.1	hypothetical protein G (291)	169 44.4	0.1	gi 157075899 gb ABV10582.1	UDP-N-acetylglucosamin (420)	169 44.5	0.14
gi 134338116 gb EBA73904.1	hypothetical protein G (413)	171 44.9	0.1	gi 198249249 gb ACH84842.1	UDP-N-acetylglucosamin (423)	169 44.5	0.14
gi 135167020 gb EBF92253.1	hypothetical protein G (352)	170 44.6	0.1	gi 218519485 gb ACR80071.1	UDP-N-acetylglucosamin (423)	169 44.5	0.14
gi 137755492 gb EBF82397.1	hypothetical protein G (238)	169 44.4	0.1	gi 141040532 gb EEZ2321.1	hypothetical protein G (96)	160 42.3	0.14
gi 135327958 gb EBG89770.1	hypothetical protein G (418)	171 44.9	0.1	gi 143630447 gb EDF95521.1	hypothetical protein G (135)	162 42.8	0.14

gi 141775381 gb ECT22687.1	hypothetical protein G (135)	162	42.8	0.14	gi 140152257 gb ECJ87157.1	hypothetical protein G (97)	157	41.7	0.22
gi 137848322 gb EBW34669.1	hypothetical protein G (83)	159	42.1	0.15	gi 165931440 emb CAP07015.1	3-phosphoshikimate 1- (440)	166	43.9	0.22
gi 138467471 gb EBZ87871.1	hypothetical protein G (269)	166	43.8	0.15	gi 11197970 gb ABH73822.1	Sequence 59 from paten (440)	166	43.9	0.22
gi 142903519 gb EDB40319.1	hypothetical protein G (319)	167	44.0	0.15	gi 1259306889 gb ACW37700.1	Sequence 59 from paten (440)	166	43.9	0.22
gi 6063409 dbj BAAR5335.1	UDP-N-acetylglucosamine (446)	169	44.5	0.15	gi 165930565 emb CAP04061.1	3-phosphoshikimate 1- (440)	166	43.9	0.22
gi 143528632 gb EDF47496.1	hypothetical protein G (379)	168	44.2	0.15	gi 138637968 gb EBF43697.1	hypothetical protein G (326)	164	43.4	0.23
gi 73912408 dbj BAE20403.1	5-enolpyruvylshikimate (231)	165	43.5	0.15	gi 134893000 gb EBI12404.1	hypothetical protein G (86)	156	41.5	0.23
gi 141468301 gb ECR99942.1	hypothetical protein G (275)	166	43.8	0.15	gi 136491502 gb EB050898.1	hypothetical protein G (169)	160	42.4	0.23
gi 143091256 gb EDC75017.1	hypothetical protein G (73)	158	41.8	0.15	gi 135044669 gb EBI13863.1	hypothetical protein G (170)	160	42.4	0.23
gi 136612405 gb EBP28570.1	hypothetical protein G (174)	163	43.1	0.15	gi 134521141 gb EB3883682.1	hypothetical protein G (104)	157	41.7	0.24
gi 137664462 gb EBV87009.1	hypothetical protein G (107)	160	42.3	0.16	gi 137172829 gb EB361062.1	hypothetical protein G (89)	156	41.5	0.24
gi 125166285 dbj BAC24475.1	murA [Wigglesworthia g (418)	168	44.3	0.16	gi 133135012 gb EBF71681.1	hypothetical protein G (402)	165	43.6	0.24
gi 16412040 emb CAD00630.1	Conserved uncharacteri (419)	168	44.3	0.16	gi 140369628 gb ECI30304.1	hypothetical protein G (294)	163	43.2	0.24
gi 136440761 gb EB018088.1	hypothetical protein G (111)	160	42.3	0.16	gi 214034673 gb EBE75413.1	UDP-N-acetylglucosamin (415)	165	43.6	0.25
gi 143736357 gb EDG51926.1	hypothetical protein G (155)	162	42.8	0.16	gi 151280568 gb ABR88978.1	UDP-N-acetylglucosamin (416)	165	43.6	0.25
gi 125498222 gb ABN44888.1	hypothetical protein G (423)	168	44.3	0.16	gi 142423151 gb ECX96538.1	hypothetical protein G (417)	165	43.6	0.25
gi 137935986 gb EBW84686.1	murZ [Listeria monocyt (132)	161	42.6	0.16	gi 135561634 gb EBI43929.1	hypothetical protein G (418)	165	43.6	0.25
gi 135591110 gb EBT62581.1	hypothetical protein G (431)	168	44.3	0.16	gi 167591717 gb ABZ83465.1	udp-n-acetylglucosamin (420)	165	43.6	0.25
gi 160347816 gb ABX26490.1	UDP-N-acetylglucosamin (70)	157	41.6	0.17	gi 135513173 gb EBI112931.1	hypothetical protein G (94)	156	41.5	0.25
gi 137720926 gb EDR84572.1	UDP-N-acetylglucosamin (446)	168	44.3	0.17	gi 78037096 emb CAJ24841.1	UDP-N-acetylglucosamin (424)	165	43.6	0.25
gi 137233843 gb EBS95366.1	hypothetical protein G (102)	159	42.1	0.17	gi 258583776 gb ACU94910.1	UDP-N-acetylglucosamin (425)	165	43.6	0.25
gi 128227429 gb ACP85094.1	Sequence 5450 from pat (282)	165	43.6	0.18	gi 138619891 gb ECA85573.1	hypothetical protein G (158)	159	42.2	0.25
gi 171851474 emb CAQ04450.1	3-phosphoshikimate 1- (467)	168	44.3	0.18	gi 137520362 gb EBU53503.1	hypothetical protein G (69)	154	41.0	0.25
gi 134410709 gb EBB19029.1	hypothetical protein G (285)	158	43.6	0.18	gi 143591526 gb EDF75600.1	hypothetical protein G (226)	161	42.7	0.26
gi 135629141 gb EBT86117.1	hypothetical protein G (89)	158	41.9	0.18	gi 134891434 gb EBB11362.1	hypothetical protein G (138)	157	42.0	0.26
gi 137233043 gb EBS94913.1	hypothetical protein G (249)	164	43.3	0.18	gi 134767538 gb EB029426.1	hypothetical protein G (120)	157	41.7	0.27
gi 142900568 gb EDB38135.1	hypothetical protein G (109)	159	42.1	0.18	gi 141041104 gb ECR22722.1	hypothetical protein G (102)	156	41.5	0.27
gi 139812606 gb ECH63945.1	hypothetical protein G (130)	160	42.4	0.19	gi 142900460 gb EDU89556.1	hypothetical protein G (332)	163	43.2	0.27
gi 125699514 emb CAW93074.1	UDP-N-acetylglucosami (419)	167	44.1	0.19	gi 136086971 gb EBU82277.1	hypothetical protein G (145)	158	42.0	0.27
gi 167732521 emb CAP50715.1	UDP-N-acetylglucosami (424)	167	44.1	0.19	gi 239911204 gb ACS34095.1	3-phosphoshikimate 1-c (398)	164	43.4	0.27
gi 137259628 gb EBT09802.1	hypothetical protein G (261)	164	43.3	0.19	gi 138345237 gb EBJ10125.1	hypothetical protein G (106)	156	41.5	0.28
gi 137867122 gb EBW45478.1	hypothetical protein G (262)	164	43.3	0.19	gi 142433170 gb ECY04151.1	hypothetical protein G (91)	155	41.3	0.28
gi 231274025 emb CAK10818.1	3-phosphoshikimate 1- (440)	167	44.1	0.19	gi 138967682 gb ECC62769.1	hypothetical protein G (66)	153	40.8	0.28
gi 231273013 emb CAX09925.1	3-phosphoshikimate 1- (440)	167	44.1	0.19	gi 1229380775 gb EEO30866.1	UDP-N-acetylglucosamin (417)	164	43.4	0.28
gi 76167624 gb AA550632.1	3-phosphoshikimate 1-ca (440)	167	44.1	0.19	gi 137945478 gb EBW90050.1	hypothetical protein G (300)	162	43.0	0.29
gi 141200123 gb ECQ31132.1	hypothetical protein G (237)	163	43.1	0.2	gi 143014918 gb EDC19274.1	hypothetical protein G (154)	158	42.0	0.29
gi 140339709 gb ECL09481.1	hypothetical protein G (88)	157	41.7	0.2	gi 135550325 gb EBI36633.1	hypothetical protein G (307)	162	43.0	0.29
gi 142888082 gb EDB29077.1	hypothetical protein G (341)	165	43.6	0.21	gi 137859016 gb EBW40859.1	hypothetical protein G (69)	153	40.8	0.29
gi 141756443 gb ECT12702.1	hypothetical protein G (208)	162	42.9	0.21	gi 139795572 gb ECH51845.1	hypothetical protein G (136)	157	41.8	0.3
gi 143875110 gb EDH25993.1	hypothetical protein G (152)	160	42.4	0.21	gi 13328790 gb AAC67962.1	Phosphoshikimate 1-carbo (440)	164	43.4	0.3
gi 20515136 gb AAW23459.1	UDP-N-acetylglucosamine (415)	166	43.8	0.21	gi 140777409 gb ECN43706.1	Phosphoshikimate 1-carbo (71)	153	40.8	0.3
gi 161594583 gb BB72243.1	UDP-N-acetylglucosamin (417)	166	43.8	0.21	gi 136905237 gb EBR14604.1	hypothetical protein G (287)	161	42.7	0.32
gi 254671262 emb CBA08549.1	UDP-N-acetylglucosami (417)	166	43.8	0.21	gi 141741379 gb EDC05533.1	hypothetical protein G (151)	157	41.8	0.32
gi 219679913 gb EED36262.1	UDP-N-acetylglucosamin (420)	166	43.8	0.21	gi 143435502 gb EDW94103.1	hypothetical protein G (295)	161	42.7	0.32
gi 140421466 gb ECL64457.1	hypothetical protein G (111)	158	41.9	0.22	gi 133740129 emb CAL63180.1	UDP-N-acetylglucosami (416)	163	43.2	0.33
gi 144189789 gb EDJ51600.1	hypothetical protein G (94)	157	41.7	0.22	gi 167283169 gb ABX36033.1	Sequence 9971 from pat (417)	163	43.2	0.33
gi 21109273 gb AAW37810.1	UDP-N-acetylglucosamine (424)	166	43.9	0.22	gi 141800948 gb ECT35640.1	hypothetical protein G (93)	154	41.1	0.33
gi 137052829 gb EBR94060.1	hypothetical protein G (112)	158	41.9	0.22	gi 117608277 gb ABK43732.1	UDP-N-acetylglucosamin (419)	163	43.2	0.33
gi 260572493 gb EEEX29055.1	UDP-N-acetylglucosamin (431)	166	43.9	0.22	gi 157638265 gb AAW55053.1	UDP-N-acetylglucosamine (419)	163	43.2	0.33
					gi 126229484 gb EEY86397.1	UDP-N-acetylglucosamin (419)	163	43.2	0.33
					gi 143193365 gb EDD48952.1	hypothetical protein G (421)	163	43.2	0.33

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gi 167288411 gb AB2412275.1	Sequence 16213 from pa	(423)	163	43.2	0.33	gi 138737511 gb ECB66481.1	hypothetical protein G	(118)	154	41.1	0.4
gi 167288662 gb AB241526.1	Sequence 15464 from pa	(423)	163	43.2	0.33	gi 142767344 gb EDA43135.1	hypothetical protein G	(119)	154	41.1	0.41
gi 116103448 gb ABU68591.1	UDP-N-acetylglucosamin	(423)	163	43.2	0.33	gi 140241779 gb ECX49161.1	hypothetical protein G	(142)	155	41.3	0.41
gi 167289031 gb AB241895.1	Sequence 15833 from pa	(423)	163	43.2	0.33	gi 142693403 gb ECZ89811.1	hypothetical protein G	(102)	153	40.9	0.41
gi 211113985 gb AAW42067.1	UDP-N-acetylglucosamine	(424)	163	43.2	0.33	gi 138212658 gb EBV44975.1	hypothetical protein G	(169)	156	41.6	0.41
gi 16572977 gb AAY48387.1	UDP-N-acetylglucosamine	(424)	163	43.2	0.33	gi 136884865 gb EBR04394.1	hypothetical protein G	(87)	152	40.6	0.41
gi 138016246 gb EBE28950.1	hypothetical protein G	(156)	157	41.8	0.33	gi 40134109 gb AAR60243.1	Sequence 6777 from pate	(237)	158	42.1	0.41
gi 134708780 gb EBC95330.1	hypothetical protein G	(158)	157	41.8	0.34	gi 138764059 gb ECB78674.1	hypothetical protein G	(201)	157	41.1	0.42
gi 128104491 gb ADA23679.1	Sequence 4217 from pat	(431)	163	43.2	0.34	gi 136430523 gb EBOL1467.1	hypothetical protein G	(249)	158	42.1	0.42
gi 259270370 gb ACW30183.1	Sequence 4217 from pat	(431)	163	43.2	0.34	gi 140728797 gb ECN1186.1	hypothetical protein G	(300)	159	42.3	0.44
gi 259365171 gb ACW59123.1	Sequence 3841 from pat	(431)	163	43.2	0.34	gi 142007843 gb ECU78491.1	hypothetical protein G	(79)	151	40.4	0.44
gi 1217110295 gb ACU94175.1	Sequence 4217 from pat	(431)	163	43.2	0.34	gi 139167173 gb ECB086616.1	hypothetical protein G	(302)	159	42.3	0.44
gi 144970267 gb ABP08557.1	Sequence 3841 from pat	(431)	163	43.2	0.34	gi 1218323683 emb CAV20010.1	UDP-N-acetylglucosami	(422)	161	42.8	0.44
gi 112037166 gb ABH88468.1	Sequence 3841 from pat	(431)	163	43.2	0.34	gi 140010510 gb ECJ98634.1	hypothetical protein G	(132)	154	41.1	0.45
gi 140811098 gb ECN67441.1	hypothetical protein G	(262)	160	42.5	0.34	gi 134333526 gb EBA70769.1	hypothetical protein G	(219)	157	41.9	0.45
gi 135393658 gb EBH33888.1	hypothetical protein G	(82)	153	40.8	0.34	gi 144169455 gb EDJ37230.1	hypothetical protein G	(437)	161	42.8	0.46
gi 136512696 gb EB064623.1	hypothetical protein G	(369)	162	43.0	0.34	gi 183224458 dbj BAG24975.1	UDP-N-acetylglucosami	(438)	161	42.8	0.46
gi 136628582 gb EBP38113.1	hypothetical protein G	(115)	155	41.3	0.34	gi 148530739 gb ABQ82738.1	UDP-N-acetylglucosamin	(438)	161	42.8	0.46
gi 136764602 gb EBQ25258.1	hypothetical protein G	(437)	163	43.2	0.34	gi 141974299 gb ECU55148.1	hypothetical protein G	(83)	151	40.4	0.46
gi 139046784 gb ECD04192.1	hypothetical protein G	(191)	158	42.0	0.34	gi 757013821 gb ABA21058.1	UDP-N-acetylglucosamine	(447)	161	42.8	0.47
gi 112802798 gb EAU00142.1	UDP-N-acetylglucosamin	(442)	163	43.2	0.35	gi 136442255 gb EBOL9063.1	hypothetical protein G	(272)	158	42.1	0.47
gi 142812888 gb EDA77094.1	hypothetical protein G	(444)	163	43.2	0.35	gi 141228028 gb ECQ50671.1	hypothetical protein G	(85)	151	40.4	0.47
gi 140434033 gb ECL72356.1	hypothetical protein G	(60)	151	40.3	0.35	gi 140977470 gb ECQ79842.1	hypothetical protein G	(276)	158	42.1	0.47
gi 139391915 gb ECE79642.1	hypothetical protein G	(117)	155	41.3	0.35	gi 135459070 gb EBH7757.1	hypothetical protein G	(86)	151	40.4	0.47
gi 140887232 gb ECO18192.1	hypothetical protein G	(273)	160	42.5	0.35	gi 135078388 gb EBF35366.1	hypothetical protein G	(388)	160	42.6	0.48
gi 142664031 gb ECZ68739.1	hypothetical protein G	(72)	152	40.6	0.35	gi 135139598 gb EBF74601.1	hypothetical protein G	(396)	160	42.6	0.48
gi 138945420 gb ECC53340.1	hypothetical protein G	(73)	152	40.6	0.36	gi 135058427 gb EBE22632.1	hypothetical protein G	(396)	160	42.6	0.48
gi 142003655 gb ECU75567.1	hypothetical protein G	(235)	159	42.3	0.36	gi 142204617 gb ECW37535.1	hypothetical protein G	(396)	160	42.6	0.48
gi 140462588 gb ECL90454.1	hypothetical protein G	(170)	157	41.8	0.36	gi 138911545 gb ECC39122.1	hypothetical protein G	(105)	152	40.7	0.49
gi 141399980 gb ECR56139.1	hypothetical protein G	(122)	155	41.3	0.36	gi 136868207 gb EBQ94410.1	hypothetical protein G	(338)	159	42.4	0.49
gi 135863805 gb EBK32366.1	hypothetical protein G	(335)	161	42.8	0.36	gi 135532404 gb EBG05889.1	hypothetical protein G	(64)	149	39.9	0.5
gi 135174336 gb EBF96923.1	hypothetical protein G	(284)	160	42.5	0.36	gi 135188364 gb EBG05889.1	hypothetical protein G	(177)	155	41.4	0.5
gi 136556862 gb EBO92852.1	hypothetical protein G	(339)	161	42.8	0.37	gi 254951509 gb ACT96209.1	3-phosphoshikimate 1-c	(411)	160	42.6	0.5
gi 9136181 gb AAB32920.1	enolpyruvylshikimate-3-ph	(108)	154	41.1	0.37	gi 138296296 gb EBY85354.1	hypothetical protein G	(78)	150	40.2	0.5
gi 138201102 gb EBY37054.1	hypothetical protein G	(108)	154	41.1	0.37	gi 143230676 gb EDD76083.1	hypothetical protein G	(110)	152	40.7	0.51
gi 1049100 gb AAA97400.1	encodes EPSP synthase do	(108)	154	41.1	0.37	gi 140674676 gb ECW73477.1	hypothetical protein G	(110)	152	40.7	0.51
gi 140266572 gb ECK66197.1	hypothetical protein G	(179)	157	41.8	0.38	gi 262316857 gb EEY97895.1	UDP-N-acetylglucosamin	(419)	160	42.6	0.51
gi 143558891 gb EDF62870.1	hypothetical protein G	(78)	152	40.6	0.38	gi 116094484 gb ABJ59636.1	UDP-N-acetylglucosamin	(421)	160	42.6	0.51
gi 143569979 gb EDF68808.1	hypothetical protein G	(417)	162	43.0	0.38	gi 55739449 gb AAV63090.1	UDP-N-acetylglucosamine	(423)	160	42.6	0.51
gi 288625775 gb EEZ58175.1	UDP-N-acetylglucosamin	(417)	162	43.0	0.38	gi 155737521 gb AAV61163.1	UDP-N-acetylglucosamine	(423)	160	42.6	0.51
gi 138381113 gb EBE27633.1	hypothetical protein G	(110)	154	41.1	0.38	gi 137662455 gb EBV31632.1	hypothetical protein G	(112)	152	40.7	0.52
gi 134904511 gb EBE20045.1	hypothetical protein G	(79)	152	40.6	0.38	gi 58253892 gb AAV42129.1	udp-n-acetylglucosamine	(431)	160	42.6	0.52
gi 12736187 gb AAO05321.1	AE016749_267 UDP-N-acety	(419)	162	43.0	0.38	gi 139341795 gb ECF56379.1	hypothetical protein G	(114)	152	40.7	0.52
gi 135671323 gb EBY12248.1	hypothetical protein G	(301)	160	42.5	0.38	gi 139444518 gb ECF14274.1	hypothetical protein G	(160)	154	41.2	0.53
gi 165970311 gb ABY76172.1	chloroplast CTP/EPSPS	(41)	148	39.7	0.39	gi 182996761 gb ACC31203.1	Sequence 120 from pate	(441)	160	42.6	0.53
gi 84366787 dbj BAB667945.1	UDP-N-acetylglucosamin	(424)	162	43.0	0.39	gi 1239678519 gb ACSO7433.1	Sequence 120 from pate	(441)	160	42.6	0.53
gi 58425507 gb AAW74544.1	UDP-N-acetylglucosamine	(424)	162	43.0	0.39	gi 1239684576 gb ACSO9094.1	Sequence 120 from pate	(441)	160	42.6	0.53
gi 188522559 gb ACD60504.1	UDP-N-acetylglucosamin	(424)	162	43.0	0.39	gi 139904103 gb ECI26001.1	hypothetical protein G	(316)	158	42.1	0.53
gi 138672451 gb ECB20843.1	hypothetical protein G	(309)	160	42.5	0.39	gi 143330349 gb EDB37054.1	hypothetical protein G	(376)	159	42.4	0.54
gi 143080046 gb EDC66841.1	hypothetical protein G	(69)	151	40.4	0.39	gi 134366442 gb EBA92583.1	hypothetical protein G	(194)	155	41.4	0.54
gi 194345478 gb EDX26444.1	UDP-N-acetylglucosamin	(448)	162	43.0	0.4	gi 134973646 gb EBB66138.1	hypothetical protein G	(321)	158	42.1	0.54

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gi 135489195 gb EBH97504.1	hypothetical protein G (119)	152 40.7	0.54	gi 1270281718 gb EFA27550.1	UDP-N-acetylglucosamin (423)	157 42.0	0.79
gi 141068175 gb ECP40329.1	hypothetical protein G (101)	151 40.5	0.54	gi 1139540894 gb ECF77125.1	hypothetical protein G (156)	151 40.5	0.79
gi 135127298 gb EBF6688.1	hypothetical protein G (276)	157 41.9	0.55	gi 142115059 gb ECV70074.1	hypothetical protein G (437)	157 42.0	0.81
gi 139579622 gb ECG03906.1	hypothetical protein G (120)	152 40.7	0.55	gi 143351054 gb ED49890.1	hypothetical protein G (228)	153 41.0	0.82
gi 142181922 gb ECW22719.1	hypothetical protein G (278)	157 41.9	0.55	gi 173912410 dbj BAE20404.1	5-enolpyruvylshikimate (231)	153 41.0	0.83
gi 137667452 gb EBV34442.1	hypothetical protein G (169)	154 41.2	0.55	gi 140854433 gb ECN95237.1	hypothetical protein G (276)	154 41.3	0.84
gi 134698699 gb EBC89437.1	hypothetical protein G (282)	157 41.9	0.56	gi 142593676 gb ECI19246.1	hypothetical protein G (392)	156 41.8	0.85
gi 136360997 gb EBN64555.1	hypothetical protein G (394)	159 42.4	0.56	gi 140108185 gb ECY59176.1	hypothetical protein G (63)	145 39.1	0.86
gi 140383936 gb ECL40504.1	hypothetical protein G (123)	152 40.7	0.56	gi 1254672604 emb CBA06320.1	UDP-N-acetylglucosami (398)	156 41.8	0.87
gi 135136971 gb EBF72904.1	hypothetical protein G (396)	159 42.4	0.56	gi 142197920 gb ECW32422.1	hypothetical protein G (400)	156 41.8	0.87
gi 135138671 gb EBF74016.1	hypothetical protein G (396)	159 42.4	0.56	gi 142908315 gb EDB43847.1	hypothetical protein G (90)	147 39.6	0.88
gi 135104860 gb EBF52299.1	hypothetical protein G (288)	157 41.9	0.57	gi 137370618 gb EBT71981.1	hypothetical protein G (292)	154 41.3	0.88
gi 137615922 gb EBW06424.1	hypothetical protein G (293)	157 41.9	0.58	gi 134656392 gb EBG64520.1	hypothetical protein G (91)	147 39.6	0.89
gi 142169325 gb ECW10606.1	hypothetical protein G (419)	159 42.4	0.59	gi 149938155 gb ABR44852.1	3-phosphoshikimate 1-c (411)	156 41.8	0.89
gi 135359014 gb EBH10607.1	hypothetical protein G (419)	159 42.4	0.59	gi 1725236 gb AAF40490.1	UDP-N-acetylglucosamine (417)	156 41.8	0.9
gi 15638978 gb AAF86297.2	UDP-N-acetylglucosamine (423)	159 42.4	0.59	gi 149950500 gb ABR49028.1	UDP-N-acetylglucosamin (417)	156 41.8	0.9
gi 46881995 gb AAT05289.1	UDP-N-acetylglucosamine (423)	159 42.4	0.59	gi 261391570 emb CAX49003.1	UDP-N-acetylglucosami (417)	156 41.8	0.9
gi 225877561 emb CAS06275.1	Putative UDP-N-acetyl (423)	159 42.4	0.59	gi 135835202 gb EBK14373.1	hypothetical protein G (214)	152 40.8	0.9
gi 164152393 emb CAC97923.1	murZ [Listeria innocua (423)	159 42.4	0.59	gi 139577870 gb ECG02772.1	hypothetical protein G (299)	154 41.3	0.9
gi 143380233 gb EDE67130.1	hypothetical protein G (430)	159 42.4	0.6	gi 260404638 gb EEW98154.1	UDP-N-acetylglucosamin (418)	156 41.8	0.9
gi 117648040 gb ABK52142.1	UDP-N-acetylglucosamin (432)	159 42.4	0.6	gi 142171308 gb ECW12107.1	hypothetical protein G (419)	156 41.8	0.91
gi 139580699 gb ECG08967.1	hypothetical protein G (117)	151 40.5	0.62	gi 142302812 gb ECY10225.1	hypothetical protein G (419)	156 41.8	0.91
gi 197703480 gb EDY49292.1	UDP-N-acetylglucosamin (445)	159 42.4	0.62	gi 262313451 gb EEY94536.1	UDP-N-acetylglucosamin (419)	156 41.8	0.91
gi 33748212 gb AAQ45218.1	Sequence 5776 from pate (446)	159 42.4	0.62	gi 135223693 gb EBG26997.1	hypothetical protein G (421)	156 41.8	0.91
gi 138264746 gb EBF66748.1	hypothetical protein G (61)	147 39.5	0.63	gi 158140612 gb ABW18924.1	UDP-N-acetylglucosamin (421)	156 41.8	0.91
gi 135176976 gb EBF98626.1	hypothetical protein G (324)	157 41.9	0.63	gi 1239506969 gb ACR80456.1	UDP-N-acetylglucosamin (421)	156 41.8	0.91
gi 162688145 gb EDO74524.1	predicted protein [Phy (454)	159 42.4	0.63	gi 139398701 gb ECB84261.1	hypothetical protein G (94)	147 39.6	0.91
gi 141825909 gb ECT51361.1	hypothetical protein G (122)	151 40.5	0.64	gi 167293014 gb ABZ45878.1	Sequence 19816 from pa (425)	156 41.8	0.92
gi 142094653 gb ECV54445.1	hypothetical protein G (282)	156 41.7	0.64	gi 1237506170 gb ACQ98488.1	gramicidin S biosynthe (1372)	163 43.5	0.92
gi 135611902 gb EBI75428.1	hypothetical protein G (125)	151 40.5	0.65	gi 126241755 gb ABO04848.1	conserved hypothetical (1372)	163 43.5	0.92
gi 141048527 gb ECP27825.1	hypothetical protein G (125)	151 40.5	0.65	gi 1121230412 gb ABM52930.1	conserved hypothetical (1372)	163 43.5	0.92
gi 136457490 gb EBO28915.1	hypothetical protein G (126)	151 40.5	0.66	gi 148026983 gb EDR85004.1	conserved hypothetical (1372)	163 43.5	0.92
gi 136659917 gb EBF56687.1	hypothetical protein G (65)	147 39.5	0.66	gi 169653498 gb EDS86191.1	conserved hypothetical (1372)	163 43.5	0.92
gi 141350070 gb ECR21239.1	hypothetical protein G (94)	149 40.0	0.66	gi 152209051 emb CAH34991.1	putative membrane prot (1372)	163 43.5	0.92
gi 142642921 gb ECZ53921.1	hypothetical protein G (248)	155 41.5	0.66	gi 124292891 gb ABN02160.1	conserved hypothetical (1372)	163 43.5	0.92
gi 136457490 gb EBO28915.1	hypothetical protein G (300)	156 41.7	0.68	gi 126226851 gb ABN90391.1	conserved hypothetical (1372)	163 43.5	0.92
gi 140159165 gb ECJ91878.1	hypothetical protein G (94)	149 40.0	0.68	gi 1242141152 gb EES27554.1	conserved hypothetical (1372)	163 43.5	0.92
gi 137997686 gb EBX19252.1	hypothetical protein G (68)	147 39.5	0.69	gi 1217502985 gb ACR50394.1	UDP-N-acetylglucosamin (429)	156 41.8	0.92
gi 140885888 gb ECO17231.1	UDP-N-acetylglucosamin (439)	158 42.2	0.71	gi 140037262 gb ECJ16748.1	hypothetical protein G (309)	154 41.3	0.93
gi 217332615 gb ACK38409.1	hypothetical protein G (440)	158 42.2	0.71	gi 138012622 gb EBX27133.1	hypothetical protein G (188)	151 40.6	0.93
gi 142610502 gb ECZ31048.1	hypothetical protein G (162)	152 40.8	0.71	gi 136266331 gb EBN00256.1	hypothetical protein G (263)	153 41.1	0.93
gi 138263743 gb EBY66096.1	hypothetical protein G (442)	158 42.2	0.71	gi 186468218 gb ACC84019.1	UDP-N-acetylglucosamin (435)	156 41.8	0.94
gi 124515207 gb EAY56718.1	UDP-N-acetylglucosamin (447)	158 42.2	0.72	gi 141298287 gb ECQ92990.1	hypothetical protein G (100)	147 39.6	0.96
gi 171351521 dbj BAB77698.1	UDP-N-acetylglucosamin (101)	149 40.0	0.73	gi 141594479 gb ECQ50739.1	hypothetical protein G (85)	146 39.4	0.96
gi 1356215891 gb EBT83682.1	hypothetical protein G (121)	150 40.3	0.74	gi 141941218 gb ECU32154.1	hypothetical protein G (102)	147 39.6	0.98
gi 141429393 gb ECR76551.1	hypothetical protein G (104)	149 40.0	0.74	gi 134327061 gb EBB66421.1	hypothetical protein G (74)	145 39.1	0.99
gi 137217195 gb EBS85944.1	hypothetical protein G (75)	147 39.6	0.75	gi 138900786 gb ECC34331.1	hypothetical protein G (123)	148 39.9	0.99
gi 137182770 gb EBS66594.1	hypothetical protein G (93)	148 39.8	0.78	gi 228229599 gb ACF87264.1	Sequence 9206 from pat (397)	155 41.6	1
gi 135372780 gb EBH19824.1	hypothetical protein G (419)	157 42.0	0.78	>>gi 27549260 gb AAO17037.1 CP4EPSPS protein [synthetic (455 aa)			
gi 142185596 gb ECW23027.1	hypothetical protein G (420)	157 42.0	0.79				

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initn: 2917 initl: 2917 opt: 2917 Z-score: 3277.0 bits: 615.6 E(): 1.8e-
173
Smith-Waterman score: 2917; 100.000% identity (100.000% similar) in 455 aa
overlap (1-455:1-455)

CP4_EP MLHGASSRPATARKSSGLSGTVRIPGDKSISHRSFMFGGLASGETRITGLLEGEDVINTG
gi|275 MLHGASSRPATARKSSGLSGTVRIPGDKSISHRSFMFGGLASGETRITGLLEGEDVINTG
10 20 30 40 50 60
70 80 90 100 110 120
CP4_EP KAMQAMGARIRKEGDTWIIDGVNGGGLAPEAPLDFGNAATGCRLTGMLGVYDFDSTFI
gi|275 KAMQAMGARIRKEGDTWIIDGVNGGGLAPEAPLDFGNAATGCRLTGMLGVYDFDSTFI
70 80 90 100 110 120
130 140 150 160 170 180
CP4_EP GDASLTKRPMGRVLNPLREMGMVQVKSDEGDRLPVTLRGKPTPTITYRVPMAAQVKSAY
gi|275 GDASLTKRPMGRVLNPLREMGMVQVKSDEGDRLPVTLRGKPTPTITYRVPMAAQVKSAY
130 140 150 160 170 180
190 200 210 220 230 240
CP4_EP LLAGLNTPGITTVIEPIIMTRDHTERKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVID
gi|275 LLAGLNTPGITTVIEPIIMTRDHTERKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVID
190 200 210 220 230 240
250 260 270 280 290 300
CP4_EP VPGDPSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
gi|275 VPGDPSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
250 260 270 280 290 300
310 320 330 340 350 360
CP4_EP VADLRVRSSTLKGTVPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSA
gi|275 VADLRVRSSTLKGTVPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSA
310 320 330 340 350 360
370 380 390 400 410 420
CP4_EP VANGKLKNGVDCDEGETSLIVVRGPDGKGLGNASGAATAHLDHRIAMSFVLMGLVSENP
gi|275 VANGKLKNGVDCDEGETSLIVVRGPDGKGLGNASGAATAHLDHRIAMSFVLMGLVSENP
370 380 390 400 410 420
430 440 450
CP4_EP VTVDDATMTATSFPEFMDLMAGLGAKIELSDTKAA
gi|275 VTVDDATMTATSFPEFMDLMAGLGAKIELSDTKAA

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430 440 450
>>gi|18266432|gb|AAL675777.1|AF464188.1 CP4EPSPS [glycine (455 aa)
initn: 2917 initl: 2917 opt: 2917 Z-score: 3277.0 bits: 615.6 E(): 1.8e-
173
Smith-Waterman score: 2917; 100.000% identity (100.000% similar) in 455 aa
overlap (1-455:1-455)

CP4_EP MLHGASSRPATARKSSGLSGTVRIPGDKSISHRSFMFGGLASGETRITGLLEGEDVINTG
gi|182 MLHGASSRPATARKSSGLSGTVRIPGDKSISHRSFMFGGLASGETRITGLLEGEDVINTG
10 20 30 40 50 60
70 80 90 100 110 120
CP4_EP KAMQAMGARIRKEGDTWIIDGVNGGGLAPEAPLDFGNAATGCRLTGMLGVYDFDSTFI
gi|182 KAMQAMGARIRKEGDTWIIDGVNGGGLAPEAPLDFGNAATGCRLTGMLGVYDFDSTFI
70 80 90 100 110 120
130 140 150 160 170 180
CP4_EP GDASLTKRPMGRVLNPLREMGMVQVKSDEGDRLPVTLRGKPTPTITYRVPMAAQVKSAY
gi|182 GDASLTKRPMGRVLNPLREMGMVQVKSDEGDRLPVTLRGKPTPTITYRVPMAAQVKSAY
130 140 150 160 170 180
190 200 210 220 230 240
CP4_EP LLAGLNTPGITTVIEPIIMTRDHTERKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVID
gi|182 LLAGLNTPGITTVIEPIIMTRDHTERKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVID
190 200 210 220 230 240
250 260 270 280 290 300
CP4_EP VPGDPSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
gi|182 VPGDPSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
250 260 270 280 290 300
310 320 330 340 350 360
CP4_EP VADLRVRSSTLKGTVPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSA
gi|182 VADLRVRSSTLKGTVPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSA
310 320 330 340 350 360
370 380 390 400 410 420
CP4_EP VANGKLKNGVDCDEGETSLIVVRGPDGKGLGNASGAATAHLDHRIAMSFVLMGLVSENP
gi|182 VANGKLKNGVDCDEGETSLIVVRGPDGKGLGNASGAATAHLDHRIAMSFVLMGLVSENP
370 380 390 400 410 420
430 440 450

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[illegible]

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[illegible]

Monsanto Company

Final Report

Regulatory Product Characterization Center

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CP4_EP VADLRVRSSTLKGVTVPEDRAPSMIDEXPIIAVAAAFAGATVMNGLEELRVKESDRLSA
gi|248 VADLRVRSSTLKGVTVPEDRAPSMIDEXPIIAVAAAFAGATVMNGLEELRVKESDRLSA
CP4_EP VANGKLNGVDCDEGETSLVVRGRPDGKGLGNASGAAVATHLDHRIAMSFVWGLVSENP
gi|248 VANGKLNGVDCDEGETSLVVRGRPDGKGLGNASGAAVATHLDHRIAMSFVWGLVSENP
CP4_EP VTVDATMIATSFPEFMDLMAGLAKIELSDTKAA
gi|248 VTVDATMIATSFPEFMDLMAGLAKIELSDTKAA
>>gi|2485224|gb|AAB73360.1|I44449 Sequence 3 from patent (455 aa)
initn: 2909 initl: 2909 opt: 2909 Z-score: 3268.1 bits: 613.9 E(): 5.7e-173
Smith-Waterman score: 2909; 99.780% identity (99.780% similar) in 455 aa
overlap (1-455:1-455)
CP4_EP MLHGASSRPATARKSSGLSGTVRIPGDKSISHRSMFVGGLASGETRITGLLEGEDVINTG
gi|248 MSHGASSRPATARKSSGLSGTVRIPGDKSISHRSMFVGGLASGETRITGLLEGEDVINTG
CP4_EP KAMQAMGARIRKEGDTWIIDGVNGGLLAPEAPLDFGNAATGCRLTMGVLGVYDFDSTFI
gi|248 KAMQAMGARIRKEGDTWIIDGVNGGLLAPEAPLDFGNAATGCRLTMGVLGVYDFDSTFI
CP4_EP GDASLTKRPMGRVNLPLREMGVQVKSDEGDRLPVTLRGPKTPTITYRVPMASAQVKSAY
gi|248 GDASLTKRPMGRVNLPLREMGVQVKSDEGDRLPVTLRGPKTPTITYRVPMASAQVKSAY
CP4_EP LLAGLNTPGITTVIEPIIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVID
gi|248 LLAGLNTPGITTVIEPIIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVID
CP4_EP VPGDSSSTAFPLVAALLVPGSDVTILNVLMPNTRTGLILTLQEMGADIEVINPRLAGGED
gi|248 VPGDSSSTAFPLVAALLVPGSDVTILNVLMPNTRTGLILTLQEMGADIEVINPRLAGGED

250 260 270 280 290 300
CP4_EP VADLRVRSSTLKGVTVPEDRAPSMIDEXPIIAVAAAFAGATVMNGLEELRVKESDRLSA
310 320 330 340 350 360
gi|248 VADLRVRSSTLKGVTVPEDRAPSMIDEXPIIAVAAAFAGATVMNGLEELRVKESDRLSA
310 320 330 340 350 360
CP4_EP VANGKLNGVDCDEGETSLVVRGRPDGKGLGNASGAAVATHLDHRIAMSFVWGLVSENP
370 380 390 400 410 420
gi|248 VANGKLNGVDCDEGETSLVVRGRPDGKGLGNASGAAVATHLDHRIAMSFVWGLVSENP
370 380 390 400 410 420
CP4_EP VTVDATMIATSFPEFMDLMAGLAKIELSDTKAA
430 440 450
gi|248 VTVDATMIATSFPEFMDLMAGLAKIELSDTKAA
430 440 450
>>gi|5957547|gb|AAE08221.1| Sequence 3 from patent US 58 (455 aa)
initn: 2909 initl: 2909 opt: 2909 Z-score: 3268.1 bits: 613.9 E(): 5.7e-173
Smith-Waterman score: 2909; 99.780% identity (99.780% similar) in 455 aa
overlap (1-455:1-455)
CP4_EP MLHGASSRPATARKSSGLSGTVRIPGDKSISHRSMFVGGLASGETRITGLLEGEDVINTG
gi|595 MSHGASSRPATARKSSGLSGTVRIPGDKSISHRSMFVGGLASGETRITGLLEGEDVINTG
CP4_EP KAMQAMGARIRKEGDTWIIDGVNGGLLAPEAPLDFGNAATGCRLTMGVLGVYDFDSTFI
gi|595 KAMQAMGARIRKEGDTWIIDGVNGGLLAPEAPLDFGNAATGCRLTMGVLGVYDFDSTFI
CP4_EP GDASLTKRPMGRVNLPLREMGVQVKSDEGDRLPVTLRGPKTPTITYRVPMASAQVKSAY
gi|595 GDASLTKRPMGRVNLPLREMGVQVKSDEGDRLPVTLRGPKTPTITYRVPMASAQVKSAY
CP4_EP LLAGLNTPGITTVIEPIIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVID
gi|595 LLAGLNTPGITTVIEPIIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVID
250 260 270 280 290 300


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CP4_EP VPGDPSSTAFPLVAALLVFGSDVTILNVLMPRTGTGLILTQEMGADIEVINPRLAGGED
      : ::::::::::::::::::::
gi|595   VPGDPSSTAFPLVAALLVFGSDVTILNVLMPRTGTGLILTQEMGADIEVINPRLAGGED
      250    260    270    280    290    300

CP4_EP VADLRVRSLTKGVTPEDRAPSMIDEPYILAIAAFAEGATVMNGLEELRVKESDRLSA
      310    320    330    340    350    360

gi|595   VADLRVRSLTKGVTPEDRAPSMIDEPYILAIAAFAEGATVMNGLEELRVKESDRLSA
      310    320    330    340    350    360

CP4_EP VANGKLKGVCDEGETSLVVGRPDGKGLGNASGAAVATHLDRHRTAMFLVNGLVSENP
      370    380    390    400    410    420

gi|595   VANGKLKGVCDEGETSLVVGRPDGKGLGNASGAAVATHLDRHRTAMFLVNGLVSENP
      370    380    390    400    410    420

CP4_EP VTVD DATMIATSFPEFMDLMAGLGAKIELSDTKAA
      430    440    450

gi|595   VTVD DATMIATSFPEFMDLMAGLGAKIELSDTKAA
      430    440    450

>>qi|144974726[gbl|ABPI2437.1| Sequence 3 from patent US (455 aa)
initn: 2909 initl: 2909 opt: 2909 Z-score: 3268.1 bits: 613.9 E(): 5.7e-
173
Smith-Waterman score: 2909; 99.780% identity (99.780% similar) in 455 aa
overlap (1-455:1-455)

CP4_EP MLHGASRPARTARKSSGSGTVTRIPGDKSISHRSFMFGGLASTRETITGLLEGEDVINTG
      10     20     30     40     50     60
gi|144 MSHGASRPARTARKSSGSGTVTRIPGDKSISHRSFMFGGLASTRETITGLLEGEDVINTG
      10     20     30     40     50     60

CP4_EP KAMQAMGARIRKEGDTWIIDVGNGGLLAPEAPLDGFNAATGCRLTMLGVGYDFDFTFI
      70     80     90    100    110    120
gi|144 KAMQAMGARIRKEGDTWIIDVGNGGLLAPEAPLDGFNAATGCRLTMLGVGYDFDFTFI
      70     80     90    100    110    120

CP4_EP GDASLTKRPMGRVLNPLREMGVQVKSEDGORLPVTLRGPKTPTIITYRVPMSAQVKS AV
      130    140    150    160    170    180
gi|144 GDASLTKRPMGRVLNPLREMGVQVKSEDGORLPVTLRGPKTPTIITYRVPMSAQVKS AV
      130    140    150    160    170    180

CP4_EP LLAGNTPGITITVEIPTMRDTHTEKMQLQGFCANLIVETDADGVTRLERGGKLTGQVID
      190    200    210    220    230    240
gi|144 LLAGNTPGITITVEIPTMRDTHTEKMQLQGFCANLIVETDADGVTRLERGGKLTGQVID
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[illegible]

CP4_EP LLAGLNTPGITTVIEPIIMTRDHTERKMLOGFGANLTVETDADGVRTIRLEGRKLTGQVID
gi|1217 LLAGLNTPGITTVIEPIIMTRDHTERKMLOGFGANLTVETDADGVRTIRLEGRKLTGQVID
190 200 210 220 230 240
CP4_EP VPGDPSSTAFPLVAALLVPGSDVTILNLMNPTRTGLILTLQEMGADIEVINPRILAGGED
250 260 270 280 290 300
gi|1217 VPGDPSSTAFPLVAALLVPGSDVTILNLMNPTRTGLILTLQEMGADIEVINPRILAGGED
250 260 270 280 290 300
CP4_EP VADLRVRSSTLKGVTVPEDRAPSMIDEYPIIAVAAAFAGCATVMNGLEELRVKESDRLSA
310 320 330 340 350 360
gi|1217 VADLRVRSSTLKGVTVPEDRAPSMIDEYPIIAVAAAFAGCATVMNGLEELRVKESDRLSA
310 320 330 340 350 360
CP4_EP VANGKLNGVDCDEGETSLVVRGRPDGKGLGNASGAATAHLDRHRIAMSFVLMGLVSENP
370 380 390 400 410 420
gi|1217 VANGKLNGVDCDEGETSLVVRGRPDGKGLGNASGAATAHLDRHRIAMSFVLMGLVSENP
370 380 390 400 410 420
CP4_EP VTVDATMTATSPFPEFMDLMAGLGAKIELSDTKAA
430 440 450
gi|1217 VTVDATMTATSPFPEFMDLMAGLGAKIELSDTKAA
430 440 450
>>gi|162318479|dbj|BAD94823.1| 5-enol-pyruvylshikimate-3- (527 aa)
initn: 2886 initl: 2886 opt: 2886 Z-score: 3241.2 bits: 609.2 E(): 1.8e-
171
Smith-Waterman score: 2886; 99.341% identity (99.341% similar) in 455 aa
overlap (1-455:73-527)
CP4_EP
MLHGASSRPATARKSSGLSGTVRIPGDKSI
10 20 30
gi|1623 ANSMLVLKKDSIFMQKFCSFRIASVATACMLHGASSRPATARKSSGLSGTVRIPGDKSI
50 60 70 80 90 100
CP4_EP
SHRSFMFGGLASGETRITGLLEGEDVINTKAMQAMGARIRKEGDTWIIDGVNGGLLAP
40 50 60 70 80 90
gi|1623 SHRSFMFGGLASGETRITGLLEGEDVINTKAMQAMGARIRKEGDTWIIDGVNGGLLAP
110 120 130 140 150 160
CP4_EP EAPLDFGNAATGCRLTMLGVGYDFDSTFIGDASLTKRPMGRVNLPLREMGVQVKSEDDG
100 110 120 130 140 150
gi|1623 EAPLDFGNAATGCRLTMLGVGYDFDSTFIGDASLTKRPMGRVNLPLREMGVQVKSEDDG
100 110 120 130 140 150

170 180 190 200 210 220
CP4_EP RLPVTLURGPKTPTPIYRVPMASAOVKSALLAGLNTPGITTVIEPIIMTRDHTERKMLOGF
160 170 180 190 200 210
gi|1623 RLPVTLURGPKTPTPIYRVPMASAOVKSALLAGLNTPGITTVIEPIIMTRDHTERKMLOGF
230 240 250 260 270 280
CP4_EP GANLTVETDADGVRTIRLEGRKLTGQVIDVPGDPSSTAFPLVAALLVPGSDVTILNVLN
220 230 240 250 260 270
gi|1623 GANLTVETDADGVRTIRLEGRKLTGQVIDVPGDPSSTAFPLVAALLVPGSDVTILNVLN
290 300 310 320 330 340
CP4_EP NPTRTGLIILTLQEMGADIEVINPRILAGGEDVADLRVRSSTLKGVTVPEDRAPSMIDEYPI
280 290 300 310 320 330
gi|1623 NPTRTGLIILTLQEMGADIEVINPRILAGGEDVADLRVRSSTLKGVTVPEDRAPSMIDEYPI
350 360 370 380 390 400
CP4_EP LAVAAAFAGCATVMNGLEELRVKESDRLSAVANGKLNGVDCDEGETSLVVRGRPDGKGL
340 350 360 370 380 390
gi|1623 LAVAAAFAGCATVMNGLEELRVKESDRLSAVANGKLNGVDCDEGETSLVVRGRPDGKGL
410 420 430 440 450 460
CP4_EP GNASGAATAHLDRHRIAMSFVLMGLVSENPVTVDATMTATSPFPEFMDLMAGLGAKIELS
400 410 420 430 440 450
gi|1623 GNASGAATAHLDRHRIAMSFVLMGLVSENPVTVDATMTATSPFPEFMDLMAGLGAKIELS
470 480 490 500 510 520
CP4_EP DTKAA
:::::
gi|1623 DTKAA
:::::
>>gi|15073182|emb|CAC41690.1| Putative 3-phosphoshikimat (455 aa)
initn: 2685 initl: 2685 opt: 2685 Z-score: 3016.5 bits: 567.4 E(): 5.8e-
159
Smith-Waterman score: 2685; 90.549% identity (97.143% similar) in 455 aa
overlap (1-455:1-455)
CP4_EP MLHGASSRPATARKSSGLSGTVRIPGDKSIHRSFMFGGLASGETRITGLLEGEDVINIG
10 20 30 40 50 60
gi|150 MSHGSPNPATARKSSDLKGLTIRIPGDKSIHRSFMFGGLAAGETRITGLLEGEDVINIG
10 20 30 40 50 60
70 80 90 100 110 120

CP4_EP KAMQAMGARIRKEGDTWIIDGVNGGLLAPEAPLDFGNAATGCRLLTMGLVGYVDFDSTFI
gi|150 KAMQAMGARIRKEGDTWIIDGVNGGLLAPEAPLDFGNAATGCRLLTMGLVGYVDFDSTFI
70 80 90 100 110 120
130 140 150 160 170 180
CP4_EP GDASLTKRPMGRVLNPLREMGMQVKSDEGDRLPVTLRGPKTPITYRVPMASAOVKSAY
gi|150 GDASLTKRPMGRVLNPLREMGMQVKSDEGDRLPVTLRGPKTPITYRVPMASAOVKSAY
130 140 150 160 170 180
190 200 210 220 230 240
CP4_EP LLAGLNTPGITTVIEPIIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVID
gi|150 LLAGLNTPGITTVIEPIIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVID
190 200 210 220 230 240
250 260 270 280 290 300
CP4_EP VPGDPSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
gi|150 VPGDPSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
250 260 270 280 290 300
310 320 330 340 350 360
CP4_EP VADLRVRSSTLKGVTVPEDRAPSMIDEYFILAFAAFAGATVMNGLEELRVKESDRLSA
gi|150 VADLRVRSSTLKGVTVPEDRAPSMIDEYFILAFAAFAGATVMNGLEELRVKESDRLSA
310 320 330 340 350 360
370 380 390 400 410 420
CP4_EP VANGKLKNGVDCDEGETSLVVRGPDGKGLGNASGAATVATHLDHRIAMSFVLMGLVSENP
gi|150 VADGLKNGVDCDEGEASLVVRGPDGKGLGNASGAATVATHLDHRIAMSFVLMGLVSENP
370 380 390 400 410 420
430 440 450
CP4_EP VTVDATMIATSFPEFMDLMAGLGAKIELSDTKAA
gi|150 VTVDATMIATSFPEFMDLMAGLGAKIELSDTKAA
430 440 450
>>gi|227343087|gb|ACP27305.1| 3-phosphoshikimate 1-carbo (448 aa)
initn: 2670 initl: 2670 opt: 2670 Z-score: 2999.7 bits: 564.3 E(): 5e-158
Smith-Waterman score: 2670; 91.518% identity (97.321% similar) in 448 aa
overlap (1-448:1-448)
10 20 30 40 50 60
CP4_EP MLHGASSRPATARKSSGLSGTVRIPGDKSISHRSFPMFGGLASGETRITGLLEGEDVINTG
gi|227 MSHGLSPRPATARKSADLKGTVRIPGDKSISHRSFPMFGGLASGETRITGLLEGEDVINTG
10 20 30 40 50 60

CP4_EP KAMQAMGARIRKEGDTWIIDGVNGGLLAPEAPLDFGNAATGCRLLTMGLVGYVDFDSTFI
gi|1227 KAMQAMGARIRKEGDTWIIDGVNGGLLAPEAPLDFGNAATGCRLLTMGLVGYVDFDSTFI
70 80 90 100 110 120
130 140 150 160 170 180
CP4_EP GDASLTKRPMGRVLNPLREMGMQVKSDEGDRLPVTLRGPKTPITYRVPMASAOVKSAY
gi|1227 GDASLTKRPMGRVLNPLREMGMQVKSDEGDRLPVTLRGPKTPITYRVPMASAOVKSAY
130 140 150 160 170 180
190 200 210 220 230 240
CP4_EP LLAGLNTPGITTVIEPIIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVID
gi|1227 LLAGLNTPGITTVIEPIIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVID
190 200 210 220 230 240
250 260 270 280 290 300
CP4_EP VPGDPSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
gi|1227 VPGDPSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
250 260 270 280 290 300
310 320 330 340 350 360
CP4_EP VADLRVRSSTLKGVTVPEDRAPSMIDEYFILAFAAFAGATVMNGLEELRVKESDRLSA
gi|1227 VADLRVRSSTLKGVTVPEDRAPSMIDEYFILAFAAFAGATVMNGLEELRVKESDRLSA
310 320 330 340 350 360
370 380 390 400 410 420
CP4_EP VANGKLKNGVDCDEGETSLVVRGPDGKGLGNASGAATVATHLDHRIAMSFVLMGLVSENP
gi|1227 VADGLKNGVDCDEGEASLVVRGPDGKGLGNASGAATVATHLDHRIAMSFVLMGLVSENP
370 380 390 400 410 420
430 440 450
CP4_EP VTVDATMIATSFPEFMDLMAGLGAKIELSDTKAA
gi|1227 VTVDATMIATSFPEFMDLMAGLGAKIELSDTKAA
430 440 450
>>gi|150030157|gb|ABR62274.1| 3-phosphoshikimate 1-carbo (456 aa)
initn: 2660 initl: 2660 opt: 2660 Z-score: 2988.4 bits: 562.2 E(): 2.1e-
157
Smith-Waterman score: 2660; 89.890% identity (96.264% similar) in 455 aa
overlap (1-455:1-455)
10 20 30 40 50 60
CP4_EP MLHGASSRPATARKSSGLSGTVRIPGDKSISHRSFPMFGGLASGETRITGLLEGEDVINTG

REG-10-042
MSL0022522
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CP4_EP MLHGASRRPATAKSSGLSTVRIPGDKSISHRSFMSGGLASGETRITGLLEGEDVINTG
gi|1115 MLNGASKAPATAKSSAGLTSVRIIPGDKSISHRSFMIIGGLASGETRITGLLEGEDVINTG
CP4_EP KAMQAMGARIKREGDWTWIDGVNGGILLAPAEPLDFGNAATGCLRTMGLVGVYDFDSTFI
gi|1115 RAMQAMGARIKREGAOWVIEGTGNGALLAPDAPLDFGNAGTGVRLTMGLVGTYDFHSTFI
CP4_EP GDASLTKRPMGRVLYNPLREMGVQVKSSEDGRLPVTURGPXPTPTIYRVPMASAQVKSAY
gi|1115 GDASLSKRPMGRVLYNPLREMGVQVSASEGRLPVTURGPXPTPIYRVPMASAQVKSAY
CP4_EP LLAGLNPGETTVIEPIMTRDHTKMLQGFGANLTVETDAGVRIILEGRGKLTQGVID
gi|1115 LLAGLNPGETTVIEPVMTRDHTKMLQFGAALSVEVDGVRTIILEGRGKLAGOVID
CP4_EP VFGDPSSTAFPLVAALLVPGSDVITINVLNMPRTGLILTLQEMGADIEVINPRLAGED
gi|1115 VFGDPSSTAFPLVAALLVPGSDITIVNVLNMPRTGLILTLQEMGADIEVINPRLAGED
CP4_EP VADLVRSTLTKGTVPEDRAPSMIDEPYILAVAAFAEGATVMNGLEELRVKESDRLSA
gi|1115 VADLVRHSELKGTVPEDRAPSMIDEPYILAVAAFAEGATVMKGLEELRVKESDRLSA
CP4_EP VANGUKLNGVDCDEGETSLVVRPGDKGLGNASGAAVATHLDHRIAMSLVMGLVSENFP
gi|1115 VADGLKLVGDCDEGEDFLIVRPGDKGLGNAGDVSTHLDHRIAMSLVLGLASEHA
CP4_EP VTIVDDATMTATSFPEFMDLMAGLAKIELSDTKAA
gi|1115 VTIDDAAMTATSFPEFPMQLMTGLGAKIELVAE
>gi|1240860935|db|ACS58602.1| 3-phosphoshikimate 1-carb3 (452 aa)

initn: 2559 initl1: 2559 opt: 2559 Z-score: 2875.0 bits: 541.2 E(): 4.4e-151
Smith-Waterman score: 2559; 86.801% identity (95.973% similar) in 447 aa
overlap (1-447:1-447)

CP4_EP MLHGASSRPATARKSGSLGTVIRIPGDKSISHRSFMFGGLASGETRITGLLEGEDVINTG
gi|240 MLNGSAPKATARKSAGTGSVRIPGDKSISHRSFMFGGLASGETRITGLLEGEDVINTG
10 20 30 40 50 60
70 80 90 100 110 120
CP4_EP KAMQAMGARIRKEGDTWIIDGVNGGLLAPLDFGNAATGCRITMGLVGVYDFDSTFI
gi|240 RAMQAMGARIRKEGEQWIDGTGNGALLAPLDFGNAGTGVRLTMGLVGVYDFRSTFT
70 80 90 100 110 120
130 140 150 160 170 180
CP4_EP GDASLTRKPMGRVLNPLREMGVQVKSDEGDRLPVTLRGEKFTPTITYRVPMSAQVKSAY
gi|240 GDASLSKRPMSGRVLNPLREMGVQVKSASGDRPLVTLRGEKFTPTITYRVPMSAQVKSAY
130 140 150 160 170 180
190 200 210 220 230 240
CP4_EP LLAGLNTPGITTVIEPIIMTRDHTKMLQGFGANLTVETDADGVRIIRLEGRKLTQVID
gi|240 LLAGLNTPGITTVIEPVMTDRHTKMLQFGAALSVEITDSEGVRIIRLEGRKLAGQVID
190 200 210 220 230 240
250 260 270 280 290 300
CP4_EP VPGDPSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
gi|240 VPGDPSSTAFPLVAALLVPGSDITIVNVLNMPTRTGLILTLQEMGADIEVANRLAGGED
250 260 270 280 290 300
310 320 330 340 350 360
CP4_EP VADLRVRSSTLKGVTVPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSA
gi|240 VADLRVRHSELKGVTVPERAPSMIDEXPIILAVACFAEGATIMKGLEELRVKESDRLSA
310 320 330 340 350 360
370 380 390 400 410 420
CP4_EP VANGKLNGVDCDEGETSLIVVRGPDGKGLGNASGAATVATHLDRHIAVSFLVMGLVSENP
gi|240 VADGLKNGVDCDEGEFLIVVRGPDGKGLGNAADGRVSTHLDHRIAMSFLVMGLASEHP
370 380 390 400 410 420
430 440 450
CP4_EP VTVDDATMTATSPFPMDLNAGLAKIELSDTKAA
gi|240 VTIDDAAMTATSPFPMQLMTGLGAKIAEVP

430 440 450

>>gi|2484148 (gb|AAB72284.1)|I49177 Sequence 5 from patent (449 aa)
initn: 2139 initl1: 2139 opt: 2442 Z-score: 2743.6 bits: 516.9 E(): 9.2e-144
Smith-Waterman score: 2442; 82.889% identity (93.556% similar) in 450 aa
overlap (1-450:1-447)

CP4_EP MLHGASSRPATARKSGSLGTVIRIPGDKSISHRSFMFGGLASGETRITGLLEGEDVINTG
gi|248 MSHSAPKATARKSEALTGETIRIPGDKSISHRSFMFGGLASGETRITGLLEGEDVINTG
10 20 30 40 50 60
70 80 90 100 110 120
CP4_EP KAMQAMGARIRKEGDTWIIDGVNGGLLAPLDFGNAATGCRITMGLVGVYDFDSTFI
gi|248 RAMQAMGARIRKEGDTWIIINGVNGGCLLOPEAALDFGNAGTGARLTMGLVGVYDMKTSFI
70 80 90 100 110 120
130 140 150 160 170 180
CP4_EP GDASLTRKPMGRVLNPLREMGVQVKSDEGDRLPVTLRGEKFTPTITYRVPMSAQVKSAY
gi|248 GDASLSKRPMSGRVLNPLREMGVQVKAADGRMPLTILIGKTPANPITYRVPMSAQVKSAY
130 140 150 160 170 180
190 200 210 220 230 240
CP4_EP LLAGLNTPGITTVIEPIIMTRDHTKMLQGFGANLTVETDADGVRIIRLEGRKLTQVID
gi|248 LLAGLNTPGITTVIEPVMTDRHTKMLQGFADLTVETDKDGVRIIRITQGLVQQTID
190 200 210 220 230 240
250 260 270 280 290 300
CP4_EP VPGDPSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
gi|248 VPGDPSSTAFPLVAALLVPGSDVTIRNVLNMPTRTGLILTLQEMGADIEVLNARLAGGED
250 260 270 280 290 300
310 320 330 340 350 360
CP4_EP VADLRVRSSTLKGVTVPEDRAPSMIDEXPIILAVAAFAEGATVMNGLEELRVKESDRLSA
gi|248 VADLRVRASKLGVVPPERAPSMIDEXPIILAAAFAGEITVMDGLDELVRKESDRLSA
310 320 330 340 350 360
370 380 390 400 410 420
CP4_EP VANGKLNGVDCDEGETSLIVVRGPDGKGLGNASGAATVATHLDRHIAVSFLVMGLVSENP
gi|248 VARGLEANGVDCTEGEMSLTVRGRPDGKGLG---GGTVATHLDRHIAVSFLVMGLAAEXP
370 380 390 400 410 420
430 440 450

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CP4_EP_VTVDDATWIAATFFEFNDMLMAGLCAKIELSDTKAA
:.....:.....:.....:
gi|248_VTVDDSNMIATSFPEFNDMPFGLCAKIELSIL
420      430      440
144
>>>gi|2485225|gb|AAB73361.1|I44450 Sequence 5 from patent (449 aa)
initn: 2139 init: 2139 opt: 2442 Z-score: 2743.6 bits: 516.9 E(): 9.2e-
144
Smith-Waterman score: 2442; 82.889% identity (93.556% similar) in 450 aa
overlap (1-450:1-447)

CP4_EP_MLHGASRPATARKSSGLGTVRIPGDKSISHRSFMFGGLASGETRITGLLEGEDVINTG
10      20      30      40      50      60
gi|248_MSHSASPATARKSEALTEIRIPGDKSISHRSFMFGGLASGETRITGLLEGEDVINTG
10      20      30      40      50      60
144
CP4_EP_KAMQAMGARIRKEGDTWIIDGVNGGULLAPEALPDFGNAATGRLTWGLVGVYDFDSTFI
70      80      90      100      110      120
gi|248_RAMQAMGARIRKEGDVWIINGVNGCQLLQPEAALDFGNAGTGARLTMGLVGVYDMKTSFI
70      80      90      100      110      120
144
CP4_EP_GDASLTRKPMGRVLNPLREMGVQVKSDEGDRPLPVLGRPKTPTPIRYRPMASAQVKSVA
130      140      150      160      170      180
gi|248_GDASLTRKPMGRVLNPLREMGVQVEAADGORMPLTIGPKTANPIYRPMASAQVKSVA
130      140      150      160      170      180
144
CP4_EP_LLAGNLTGIIITVIEPTIMTRDHTKMLQGFAGNLTVETDAGVRIIRLEGRKLTGQVID
190      200      210      220      230      240
gi|248_LLAGNLTGVTIVIEPTIMTRDHTKMLQGFADLTVETDKDGVRHIRITGQGLVGGQITID
190      200      210      220      230      240
144
CP4_EP_VPGDPSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
250      260      270      280      290      300
gi|248_VPGDPSSTAFPLVAALLVPGSDVTIRNVLNMPTRTGLILTLQEMGADIEVINLARLAGGED
250      260      270      280      290      300
144
CP4_EP_VADLURVRSTLKGVTVPEDRAPSMIDEPYILAFAAFAEGATVWNGLEELRVKESDRLSA
310      320      330      340      350      360
gi|248_VADLURVRSTLKGVTVPEDRAPSMIDEPYVILAFAAFAEGATVMDGLDELRVKESDRLAA
310      320      330      340      350      360
144
CP4_EP_VANGLKNGVDCDEGETSLVVRGPDGKGLGNASGAATAHLDRHTAMSLVNGLVSENP
370      380      390      400      410      420
gi|248_VARGLEANGVDCDEGETSLVVRGPDGKGLG--GGTVAHLDRHTAMSLVNGLVGLAAEKP
370      380      390      400      410      420

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370      380      390      400      410
CP4_EP VTVDDATMIATSPFEFMDLMAGLGAIELSDTKAA
      430      440      450
gi|248 VTVDDSNMIATSPFEFMDMPGLGAKIELSIL
      420      430      440
Smith-Waterman score: 2442;   82.88% identity (93.556% similar) in 450 aa
overlap (1-450:1-447)

10    20    30    40    50    60
CP4_EP MLHGASSPATARSSGLGVTRIPDGKSTSHRSFMFGGLASGETRITLGLEGEDVINTG
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|144 MSHASPPAPATARRSEALTGEIRIPDGKSTSHRSFMFGGLASGETRITLGLEGEDVINTG
      10    20    30    40    50    60
      70    80    90    100   110   120
CP4_EP KAMQAMGARIRKEGDVTIIDVGNGVGLLAPEAPLDFGNAATGCRLTNGLVGVYDFDSIFI
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|144 RAMQAMGAKIRKEGDVVIINGVNGC LLOPEAALDFGNAGTGARLTNGLVGT YDMKTSFI
      70    80    90    100   110   120
      130   140   150   160   170   180
CP4_EP GDASITKRPMMGRVLNPLREMGOVKQSEDGORLPVTLRGPKTPTIITYRVPMASAOVKSAY
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
      : : : : ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~
gi|144 GDASLSKRPMMGRVLNPLREMGOVVEAADGDRMPLTLIGPKTANPTIITYRVPMASAOVKSAY
      130   140   150   160   170   180
      190   200   210   220   230   240
CP4_EP LIAGLNTPGITVTIETPIIMTRODHTMKMLQQGFGANLTVETDADGVRTIRLEGRKLTCQVID
      : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
      : : : : ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~
gi|144 LIAGLNTPGVTTIVIEPVMTIRODHTMKMLQQGFADLTVETDKDGVRRHRIITCGQKLVGGITID
      190   200   210   220   230   240
      250   260   270   280   290   300
CP4_EP VEGDPSSTAFFPLVAALVPVGSVDVTLNVLMNPTRTGLILLTLOEMGADIEVINPRLAGGED
      : : : : ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~
      : : : : ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~
gi|144 VEGDPSSTAFFPLVAALVEGSDVTRIINVLMNPTRTGLILLTLOEMGADIEVINLARLAGGED
      250   260   270   280   290   300
      310   320   330   340   350   360
CP4_EP VADLRVRSGSTLKGVTPVEDRAPSMIDYPILAVAAFAEAGTVNWGLEELRVKESDRLSA
      : : : : ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~
      : : : : ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~ ~~~~~~
gi|144 VADLRVRASKLKVWVPVAPS MIDYPVLIATAASFAEAGTEVMGDGLDELVRKESDRLAA
      310   320   330   340   350   360
      370   380   390   400   410   420

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310      320      330      340      350      360
CP4_EP VANGIKLVGDCDEGETSLVVRPDKGKGLGNASGAAVATHLDRITAMSLVNGLYSENP
370      380      390      400      410      420
::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: ::::
gi|248 VARGLEANGVDCTEGEMSLTVVRPDKGKGLG--GGTVATHLDRITAMSLVNGLAKEP
370      380      390      400      410
310      320      330      340      350      360
CP4_EP VTVDATMIATSFPEFMDLMAGLKGAKIELSDTKAA
430      440      450
:::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: ::::
gi|248 VTVDSSNMIAATSFPEFMDMPMGLGAKIELSIL
420      430      440
>>>gi|144974727|gb|ABP12438.1| Sequence 5 from patent US (449 aa)
initn: 2139 initl: 2139 opt: 2442 z-score: 2743.6 bits: 516.9 E(): 9.2e-
144
Smith-Waterman score: 2442; 82.889% identity (93.556% similar) in 450 aa
overlap (l=450;l=447)
310      320      330      340      350      360
CP4_EP MLHGASSPATAKSSGLSGTVRIPGDKSISHRSFMFGGLASGETRITGLLEGEDVINTG
400      410      420      430      440      450
::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: ::::
gi|144 MSHASAPKPATARRSEALTGEIRIPGDKSISHRSFMFGGLASGETRITGLLEGEDVINTG
400      410      420      430      440      450
310      320      330      340      350      360
CP4_EP KAMQAMGARIKEGDTWIIDGVNGGGLLEAPLDFGNAATGCLRTMGLVGVYDFDSFTI
470      480      490      500      510      520
:::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: ::::
gi|144 RAMQAMGAKIRKEGDVWTINGVNGCGLLOPEAALDFGNAGTGARLTMGLVGTYDMKTSFI
470      480      490      500      510      520
310      320      330      340      350      360
CP4_EP GDASLTKPMGRVLNPLREMGVQVEEDGDRPLVTLRGPKTPTPIYRVPMSAQVKSAV
530      540      550      560      570      580
:::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: ::::
gi|144 GDASLSKPMGRVLNPLREMGVQVEAAGDRMPLTLTGKPTAMPITTYRVPMSAQVKSAV
530      540      550      560      570      580
310      320      330      340      350      360
CP4_EP LLAGLNTPGITTVIEPINTRDHTKMLQGFGANLTVETDADGVRTIRLEGRKLTQGVID
590      600      610      620      630      640
:::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: ::::
gi|144 LLAGLNTPGVTVIEPVMTRDHTKMLQGFADLTVETDKDGVRIIRITCGQKLVGQTID
590      600      610      620      630      640
310      320      330      340      350      360
CP4_EP VPGDPSSTAFPLVAALLVPGSDVTILNVLMNPTRTGLILTLQEMGADIEVINPRLAGGED
650      660      670      680      690      700
:::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: :::: ::::
gi|144 VPGDPSSTAFPLVAALLVEGSDVTIRNVLMNPTRTGLILTLQEMGADIEVINARLAGGED
650      660      670      680      690      700
310      320      330      340      350      360

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CP4_EP VADLRVRSTLKGTVPEDRAPSMIDEYPIIAVAAAFAGATVMNGLEELRVKESDRLSA
gi|144 VADLRVRASKLKGTVVPPERAPSMIDEYFVLAIAAASFAGETVMDGLDELVRKESDRLSA
310 320 330 340 350 360
CP4_EP VANGKLNGVDCDEGETSILVVRGRPDGKGLGNASGAAVATHLDHRIAMSFVWGLVSNP
370 380 390 400 410 420
gi|144 VARGLEANGVDCTEGEMSLTVRGRPDGKGLG--GGTVATHLDHRIAMSFVWGLVSNP
370 380 390 400 410
CP4_EP VTVDATMIATSFPEFMDLMAGLAKIELSDTKAA
gi|144 VTVDSDNMIAATSFPEFMDMMPGLGAKIELSIL
420 430 440
>>gi|5957548|gb|AAE08222.1| Sequence 5 from patent US 58 (449 aa)
initn: 2139 init1: 2139 opt: 2442 Z-score: 2743.6 bits: 516.9 E(): 9.2e-
144
Smith-Waterman score: 2442; 82.889% identity (93.556% similar) in 450 aa
overlap (1-450:1-447)
CP4_EP MLHGASRPATARKSSGLSGTVRIPODKSISHRSMFVGGLASGETRITGLLEGEDVINTG
gi|595 MSHSASPATARRSEALTGETRIPDKSISHRSMFVGGLASGETRITGLLEGEDVINTG
10 20 30 40 50 60
CP4_EP KAMQAMGARIRKEGDTWIIDGVNGGLLAPEAPLDFGNAATGCRLTMTGLVGYDFDSTFI
gi|595 RAMQAMGARIRKEGDTWIIDGVNGGLLAPEAPLDFGNAATGCRLTMTGLVGYDMKTSFI
70 80 90 100 110 120
CP4_EP GDASLTKRPWGRVNLPLREMGVQVKSDEGDRPLFVTLRGPKTPTITYRVPMASAOVKSAY
gi|595 GDASLSKRPWGRVNLPLREMGVQVEAAGDRMPLTLIGPKTANPITYRVPMASAOVKSAY
130 140 150 160 170 180
CP4_EP LIAGLNTPGITTVIEPIIMTRDHTKMLQGFAGNLIVETDADGVRIIRLEGRKLTGQVID
gi|595 LIAGLNTPGITTVIEPIIMTRDHTKMLQGFAGNLIVETDADGVRIIRITGQGLVGTID
190 200 210 220 230 240
CP4_EP VPGDSSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
gi|595 VPGDSSSTAFPLVAALLVEGSDVTIRNVLNMPTRTGLILTLQEMGADIEVLNARLAGGED

CP4_EP VADLRVRSTLKGTVPEDRAPSMIDEYPIIAVAAAFAGATVMNGLEELRVKESDRLSA
gi|595 VADLRVRASKLKGTVVPPERAPSMIDEYFVLAIAAASFAGETVMDGLDELVRKESDRLSA
310 320 330 340 350 360
CP4_EP VANGKLNGVDCDEGETSILVVRGRPDGKGLGNASGAAVATHLDHRIAMSFVWGLVSNP
370 380 390 400 410 420
gi|595 VARGLEANGVDCTEGEMSLTVRGRPDGKGLG--GGTVATHLDHRIAMSFVWGLVSNP
370 380 390 400 410
CP4_EP VTVDATMIATSFPEFMDLMAGLAKIELSDTKAA
gi|595 VTVDSDNMIAATSFPEFMDMMPGLGAKIELSIL
420 430 440
>>gi|5957549|gb|AAE08223.1| Sequence 7 from patent US 58 (449 aa)
initn: 2139 init1: 2139 opt: 2442 Z-score: 2743.6 bits: 516.9 E(): 9.2e-
144
Smith-Waterman score: 2442; 82.889% identity (93.556% similar) in 450 aa
overlap (1-450:1-447)
CP4_EP MLHGASRPATARKSSGLSGTVRIPODKSISHRSMFVGGLASGETRITGLLEGEDVINTG
gi|595 MSHSASPATARRSEALTGETRIPDKSISHRSMFVGGLASGETRITGLLEGEDVINTG
10 20 30 40 50 60
CP4_EP KAMQAMGARIRKEGDTWIIDGVNGGLLAPEAPLDFGNAATGCRLTMTGLVGYDFDSTFI
gi|595 RAMQAMGARIRKEGDTWIIDGVNGGLLAPEAPLDFGNAATGCRLTMTGLVGYDMKTSFI
70 80 90 100 110 120
CP4_EP GDASLTKRPWGRVNLPLREMGVQVKSDEGDRPLFVTLRGPKTPTITYRVPMASAOVKSAY
gi|595 GDASLSKRPWGRVNLPLREMGVQVEAAGDRMPLTLIGPKTANPITYRVPMASAOVKSAY
130 140 150 160 170 180
CP4_EP LIAGLNTPGITTVIEPIIMTRDHTKMLQGFAGNLIVETDADGVRIIRLEGRKLTGQVID
gi|595 LIAGLNTPGITTVIEPIIMTRDHTKMLQGFAGNLIVETDADGVRIIRITGQGLVGTID
190 200 210 220 230 240
CP4_EP VPGDSSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
gi|595 VPGDSSSTAFPLVAALLVEGSDVTIRNVLNMPTRTGLILTLQEMGADIEVLNARLAGGED

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[illegible]

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CP4_EP  GDASLTKRPMGRVLNPLREMGVQVKSEGDRLPVTLRGPKTPTITYRVPMAAQVKSAY
gi|264  GDASLTKRPMGRVLNPLREMGVQVEAAEGDRMPLTLIGRTANPTITYRVPMAAQVKSAY
      130      140      150      160      170      180

CP4_EP  LLAGLNTPGITTVIEPIWTRDHTERKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVID
gi|264  LLAGLNTPGITTVIEPVWTRDHTERKMLQGFADLTVDKDGVRHIVGQGLTGQTID
      190      200      210      220      230      240

CP4_EP  VPGDPSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
gi|264  VPGDPSSTAFPLVAALLVEGSDVTIRNVLNMPTRTGLILTLQEMGADIEIIDPRLAGGED
      250      260      270      280      290      300

CP4_EP  VADLRVRSSTLKGVTVPEDRAPSMIDEXPILAVAAFAEGATVMNGLEELRVKESDRLSA
gi|264  VADLRVRSSTLKGVTVPEDRAPSMIDEXPILAVAAFAEGATVMNGLEELRVKESDRLSA
      310      320      330      340      350      360

CP4_EP  VANGKLNGVDCDEGETSLVVRGRPDGKLGNSAGAAVATHLDHRIAMSFVMGLVSENP
gi|264  VARGLEANGVDCTEGEMSLTVRGRPGGKGLG---GGTVATHLDHRIAMSFVMGLASEKP
      370      380      390      400      410

CP4_EP  VTVDATMTATSPFPEFMDLMAGLAKIELSDTKAA
gi|264  VTVDSTMTATSPFPEFMGMWAGLAKIAESGAE
      420      430      440      450

>>gi|161334826|gb|ABX61131.1| 3-phosphoshikimate 1-carbo (450 aa)
      initn: 2452 initl: 2123 opt: 2423  Z-score: 2722.3  bits: 512.9  E(): 1.4e-
      142
Smith-Waterman score: 2423; 82.222% identity (93.333% similar) in 450 aa
overlap (1-450:1-447)

CP4_EP  MLHGASSRPATARKSSGLSGTVRIPGDKSISHRSFWMFGGLASGETRITGLLEGEDVINTG
gi|161  MSHSACPKEPATARHSQALTGEIRIPGDKSISHRSFWMFGGLASGKTRITGLLEGEDVINTG
      10      20      30      40      50      60

CP4_EP  KAMQAMGARIRKEGDTWIIDGVNGGLLAPAPLDFGNATGCRLTMTGLGVYDFDFTFI
gi|161  RAMQAMGARIRKEGDVWIINGVNGCLLQPEAPLDFGNAGTGARLTMTGLGVYDMKTSFI
      70      80      90      100      110      120
```

```
CP4_EP  GDASLTKRPMGRVLNPLREMGVQVKSEGDRLPVTLRGPKTPTITYRVPMAAQVKSAY
gi|161  GDASLTKRPMGRVLNPLREMGVQVEAAEGDRMPLTLIGRTANPTIAYRVPMAAQVKSAY
      130      140      150      160      170      180

CP4_EP  LLAGLNTPGITTVIEPIWTRDHTERKMLQGFGANLTVETDADGVRTIRLEGRKLTGQVID
gi|161  LLAGLNTPGITTVIEPVWTRDHTERKMLQGFADLTVDKDGVRHIVGQGLTGQTID
      190      200      210      220      230      240

CP4_EP  VPGDPSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
gi|161  VPGDPSSTAFPLVAALLVEGSDVTIRNVLNMPTRTGLILTLQEMGADIEIIDPRLAGGED
      250      260      270      280      290      300

CP4_EP  VADLRVRSSTLKGVTVPEDRAPSMIDEXPILAVAAFAEGATVMNGLEELRVKESDRLSA
gi|161  VADLRVRSSTLKGVTVPEDRAPSMIDEXPILAVAAFAEGATVMNGLEELRVKESDRLSA
      310      320      330      340      350      360

CP4_EP  VANGKLNGVDCDEGETSLVVRGRPDGKLGNSAGAAVATHLDHRIAMSFVMGLVSENP
gi|161  VARGLEANGVDCTEGEMSLTVRGRPGGKGLG---GGTVATHLDHRIAMSFVMGLASEKP
      370      380      390      400      410

CP4_EP  VTVDATMTATSPFPEFMDLMAGLAKIELSDTKAA
gi|161  VTVDSTMTATSPFPEFMGMWAGLAKIAESGAE
      420      430      440      450

>>gi|260156845|gb|EEM91925.1| 3-phosphoshikimate 1-carbo (450 aa)
      initn: 2452 initl: 2123 opt: 2423  Z-score: 2722.3  bits: 512.9  E(): 1.4e-
      142
Smith-Waterman score: 2423; 82.222% identity (93.333% similar) in 450 aa
overlap (1-450:1-447)

CP4_EP  MLHGASSRPATARKSSGLSGTVRIPGDKSISHRSFWMFGGLASGETRITGLLEGEDVINTG
gi|260  MSHSACPKEPATARHSQALTGEIRIPGDKSISHRSFWMFGGLASGKTRITGLLEGEDVINTG
      10      20      30      40      50      60

CP4_EP  KAMQAMGARIRKEGDTWIIDGVNGGLLAPAPLDFGNATGCRLTMTGLGVYDFDFTFI
gi|260  RAMQAMGARIRKEGDVWIINGVNGCLLQPEAPLDFGNAGTGARLTMTGLGVYDMKTSFI
      70      80      90      100      110      120
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10      20      30      40      50      60
70      80      90     100     110     120
CP4_EP KAMQAMGARIRKEGDTWIIDGVNGGALLAEAPLDFGNATGRLTMGLVGVDFDSTFI
.....:.....:.....:.....:.....:.....:
gi|233 RAMQAMGARIRKEGDVWIIINGVNGCILLQEPALDFGNAGTGARLTMLGVLTGDMKTSFI
70      80      90     100     110     120
130     140     150     160     170     180
CP4_EP GDASLTKRPMGRVLNPLREMGVQVKSDEGRPLFVTLRGPKTPTIITYRVPMSAQVKSVA
.....:.....:.....:.....:.....:.....:
gi|233 GDASLSKRPMPGRVLNPLREMGVQVEAAEGDRMPLTLIGPRTANPIAIRYVPMSAQVKSVA
130     140     150     160     170     180
190     200     210     220     230     240
CP4_EP LLAGNIFGITVIEPTMTDRHTEKMLQGFGANLTIVETDADGVRTIRLEGRGKLTQQVID
.....:.....:.....:.....:.....:.....:
gi|233 LLAGNIFGVTIVIEPTMTDRHTEKMLQGFGANLTIVETDKDGVHRIRIVGQKLTGQTID
190     200     210     220     230     240
250     260     270     280     290     300
CP4_EP VPGDPSSTAPFLVAALIVPGSDVTILNVLNMPRTGLIILFLQEMGADIEVINPRLAGGED
.....:.....:.....:.....:.....:.....:
gi|233 VPGDPSSTAPFLVAALIVGSDVTIRNVLNMPRTGLIILFLQEMGADIEIIDPRLAGGED
250     260     270     280     290     300
310     320     330     340     350     360
CP4_EP VADLRVRSSTLKGVTVPEDRAPSMIDEXPTLAVAAFAEGATVYMGLEELRVKESDRLSA
.....:.....:.....:.....:.....:.....:
gi|233 VADLRVRASKLGVVPPERAPSMIDEXPTLAVAAFAEGATVYMGLEELRVKESDRLAA
310     320     330     340     350     360
370     380     390     400     410     420
CP4_EP VANGLLKNGVDCDEGTSLVVRGPRDGKGLGNASGAAVATHLDHRIAMFLVGMVSENP
.....:.....:.....:.....:.....:.....:
gi|233 VARGLEANGVDCDEGTSLVVRGPRDGKGLGNASGAAVATHLDHRIAMFLVGMVSENP
370     380     390     400     410     420
430     440     450
CP4_EP VTVDATMIATSFPEFMDLMAGLAKIELSDTKAA
.....:.....:.....:.....:.....:.....:
gi|233 VTVDSTMIATSFPEFNGMAGLAKIAESGAE
420     430     440     450
>>>gi|261745668|gb|EEY33594.1| 3-phosphoshikimate 1-carbo (450 aa)
initn: 2452 initl: 2123 opt: 2423 z-score: 2722.3 bits: 512.9 E(): 1.4e-
142
Smith-Waterman score: 2423; 82.22% identity (93.33% similar) in 450 aa
overlap (1-450:1-447)
10      20      30      40      50      60

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CP4_EP MLHGASRRPATARKSSGLSGTVRIPGDKSISHRSFMFGGLASGETRITGLLEGEDVINTG
gi|261 MSHSACPKEATARHQAALTEIRIPGDKSISHRSFMFGGLASGKTRITGLLEGEDVINTG
10 20 30 40 50 60
70 80 90 100 110 120
CP4_EP KAMQANGARIRKEGDTWIIDGVNGGGLLAPEAPLDFGNAATGCRLTMTGLVGVYDFDSTFI
gi|261 RAMQANGARIRKEGDTWIIDGVNGGGLLAPEAPLDFGNAATGCRLTMTGLVGVYDFDSTFI
70 80 90 100 110 120
130 140 150 160 170 180
CP4_EP GDASLTKRPMGRVNLPLREMGVQVKSDEGDRLPVTLRGPKTPTPIYRVPMASAOQVKSAY
gi|261 GDASLSKRPMGRVNLPLREMGVQVKSDEGDRLPVTLRGPKTPTPIYRVPMASAOQVKSAY
130 140 150 160 170 180
190 200 210 220 230 240
CP4_EP LLAGLNTPGITTVIEPIIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRGKLTGQVID
gi|261 LLAGLNTPGITTVIEPIIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRGKLTGQVID
190 200 210 220 230 240
250 260 270 280 290 300
CP4_EP VPGDSSAFPLVAALLVFGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
gi|261 VPGDSSAFPLVAALLVFGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
250 260 270 280 290 300
310 320 330 340 350 360
CP4_EP VADLRVRSSTLKGVTVPEDRAPSMIDEYPIIAVAFAEGATVMNGLEELRVKESDRLSA
gi|261 VADLRVRSSTLKGVTVPEDRAPSMIDEYPIIAVAFAEGATVMNGLEELRVKESDRLSA
310 320 330 340 350 360
370 380 390 400 410 420
CP4_EP VANGKLKNGVDCDEGETSLVVRGPDGKGLGNASGAAVATHLDHRIAMSFVLMGLVSENP
gi|261 VANGKLKNGVDCDEGETSLVVRGPDGKGLGNASGAAVATHLDHRIAMSFVLMGLVSENP
370 380 390 400 410 420
430 440 450
CP4_EP VTVDATMIATSFPEFMDLMAGLAKIELSDTKAA
gi|261 VTVDATMIATSFPEFMDLMAGLAKIELSDTKAA
430 440 450
460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000
>>gi|261293812|gb|EEX97308.1| 3-phosphoshikimate 1-carbo (450 aa)
initn: 2448 init1: 2119 opt: 2419 Z-score: 2717.8 bits: 512.1 E(): 2.5e-142

Smith-Waterman score: 2419; 82.000% identity (93.333% similar) in 450 aa overlap (1-450:1-447)
CP4_EP MLHGASRRPATARKSSGLSGTVRIPGDKSISHRSFMFGGLASGETRITGLLEGEDVINTG
gi|261 MSHSACPKEATARHQAALTEIRIPGDKSISHRSFMFGGLASGKTRITGLLEGEDVINTG
10 20 30 40 50 60
70 80 90 100 110 120
CP4_EP KAMQANGARIRKEGDTWIIDGVNGGGLLAPEAPLDFGNAATGCRLTMTGLVGVYDFDSTFI
gi|261 RAMQANGARIRKEGDTWIIDGVNGGGLLAPEAPLDFGNAATGCRLTMTGLVGVYDFDSTFI
70 80 90 100 110 120
130 140 150 160 170 180
CP4_EP GDASLTKRPMGRVNLPLREMGVQVKSDEGDRLPVTLRGPKTPTPIYRVPMASAOQVKSAY
gi|261 GDASLSKRPMGRVNLPLREMGVQVKSDEGDRLPVTLRGPKTPTPIYRVPMASAOQVKSAY
130 140 150 160 170 180
190 200 210 220 230 240
CP4_EP LLAGLNTPGITTVIEPIIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRGKLTGQVID
gi|261 LLAGLNTPGITTVIEPIIMTRDHTKMLQGFGANLTVETDADGVRTIRLEGRGKLTGQVID
190 200 210 220 230 240
250 260 270 280 290 300
CP4_EP VPGDSSAFPLVAALLVFGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
gi|261 VPGDSSAFPLVAALLVFGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED
250 260 270 280 290 300
310 320 330 340 350 360
CP4_EP VADLRVRSSTLKGVTVPEDRAPSMIDEYPIIAVAFAEGATVMNGLEELRVKESDRLSA
gi|261 VADLRVRSSTLKGVTVPEDRAPSMIDEYPIIAVAFAEGATVMNGLEELRVKESDRLSA
310 320 330 340 350 360
370 380 390 400 410 420
CP4_EP VANGKLKNGVDCDEGETSLVVRGPDGKGLGNASGAAVATHLDHRIAMSFVLMGLVSENP
gi|261 VANGKLKNGVDCDEGETSLVVRGPDGKGLGNASGAAVATHLDHRIAMSFVLMGLVSENP
370 380 390 400 410 420
430 440 450
CP4_EP VTVDATMIATSFPEFMDLMAGLAKIELSDTKAA
gi|261 VTVDATMIATSFPEFMDLMAGLAKIELSDTKAA
430 440 450
460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000

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```
CP4_EP KAMQANGARIRKEGDTWIIDGVNGGLLAPEAPLDFGNAATGCRLTMTGLVGVYDFDSTFI      70      80      90      100      110      120
.....: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|263 RAMQANGARIRKEGDWIIINGVNGCLLQPEAPLDFGNAGTGARLTMTGLVGYDMKTSFI      70      80      90      100      110      120

CP4_EP GDASLTKRPNGRVNPLNREMGVQVKSDEGDRPLPVTLRGPKTPTPIITYRVPMASAOVKSAY      130      140      150      160      170      180
.....: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|263 GDASLSKRPNGRVNPLNREMGVQVEAAEGDRMPLTLIGPTANPIAYRVPMASAOVKSAY      130      140      150      160      170      180

CP4_EP LLAGLNTPGITTVIEPIIMTRDHTERKMLQGFGANLTIVETDADGVRTIRLEGRGKLTGQVID      190      200      210      220      230      240
.....: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|263 LLAGLNTPGITTVIEFVMTDRHTERKMLQFGADLTIVETDKDGVRRHIRIVGQGLTGQTID      190      200      210      220      230      240

CP4_EP VPGDPSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED      250      260      270      280      290      300
.....: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|263 VPGDPSSTAFPLVAALLVEGSDVTIRNVLNMPTRTGLILTLQEMGADIEIIDPRLAGGED      250      260      270      280      290      300

CP4_EP VADLRVRSSTLKGVTVPEDRAPSMIDEXPILAVAAAFAGATVMNGLEELRVKESDRLSA      310      320      330      340      350      360
.....: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|263 VADLRVKASKLKGVVVPPERAPSMIDEXPVLAIAAASFAGETVMDGLDELRVKESDRLAA      310      320      330      340      350      360

CP4_EP VANGKLNGVDCDEGETSLVVRGRPDGKGLGNASGAAVATHLDHRIAMSFVLMGLVSENP      370      380      390      400      410      420
:: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|263 VARGLEANGVDCTEGEMSLTVRGRPGKGLG--GGTVGTHLDHRIAMSFVLMGLASEKP      370      380      390      400      410

CP4_EP VTVDDATMIATSFPEFMDLMAGLAKIELSDTKAA      430      440      450
: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|263 VTVDDSTMIATSFPEFGMNMAGLAKIAESGAE      420      430      440      450

>>gi|260153122|gb|EEW88214.1| 3-phosphoshikimate 1-carbo (450 aa)
initn: 2437 init1: 2118 opt: 2414 Z-score: 2712.2 bits: 511.1 E(): 5.2e-
142
Smith-Waterman score: 2414; 81.778% identity (93.333% similar) in 450 aa
overlap (1-450:1-447)

CP4_EP MLHGASRPATARKSGLSGTVRIFPGDKSISHRSFMFGGLASGETRITGLLEGEDVINTG      10      20      30      40      50      60
: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
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gi|260 MSHSACPKPATARHSQALTGEIRIPGDKSISHRSFMFGGLASGKTRITGLLEGEDVINTG      10      20      30      40      50      60

CP4_EP KAMQANGARIRKEGDTWIIDGVNGGLLAPEAPLDFGNAATGCRLTMTGLVGVYDFDSTFI      70      80      90      100      110      120
.....: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|260 RAMQANGARIRKEGDWIIINGVNGCLLQPEAPLDFGNAGTGARLTMTGLVGYDMKTSFI      70      80      90      100      110      120

CP4_EP GDASLTKRPNGRVNPLNREMGVQVKSDEGDRPLPVTLRGPKTPTPIITYRVPMASAOVKSAY      130      140      150      160      170      180
.....: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|260 GDASLSKRPNGRVNPLNREMGVQVEAAEGDRMPLTLIGPTANPIAYRVPMASAOVKSAY      130      140      150      160      170      180

CP4_EP LLAGLNTPGITTVIEPIIMTRDHTERKMLQGFGANLTIVETDADGVRTIRLEGRGKLTGQVID      190      200      210      220      230      240
.....: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|260 LLAGLNTPGITTVIEFVMTDRHTERKMLQFGADLTIVETDKDGVRRHIRIVGQGLTGQTID      190      200      210      220      230      240

CP4_EP VPGDPSSTAFPLVAALLVPGSDVTILNVLNMPTRTGLILTLQEMGADIEVINPRLAGGED      250      260      270      280      290      300
.....: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|260 VPGDPSSTAFPLVAALLVEGSDVTIRNVLNMPTRTGLILTLQEMGADIEIIDPRLAGGED      250      260      270      280      290      300

CP4_EP VADLRVRSSTLKGVTVPEDRAPSMIDEXPILAVAAAFAGATVMNGLEELRVKESDRLSA      310      320      330      340      350      360
.....: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|260 VADLRVKASKLKGVVVPPERAPSMIDEXPVLAIAAASFAGETVMDGLDELRVKESDRLAA      310      320      330      340      350      360

CP4_EP VANGKLNGVDCDEGETSLVVRGRPDGKGLGNASGAAVATHLDHRIAMSFVLMGLVSENP      370      380      390      400      410      420
:: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|260 VARGLEANGVDCTEGEMSLTVRGRPGKGLG--GGTVGTHLDHRIAMSFVLMGLASEKP      370      380      390      400      410

CP4_EP VTVDDATMIATSFPEFMDLMAGLAKIELSDTKAA      430      440      450
: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
gi|260 VTVDDSTMIATSFPEFGMNMAGLAKIAESGAE      420      430      440      450

>>gi|17983963|gb|AAL53098.1| 3-phosphoshikimate 1-carbox (480 aa)
initn: 2437 init1: 2118 opt: 2414 Z-score: 2711.7 bits: 511.1 E(): 5.5e-
142
Smith-Waterman score: 2414; 81.778% identity (93.333% similar) in 450 aa
overlap (1-450:31-477)
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```
CP4_EP VTVDATMIATSPFEFMDLMAGLGAKEIETDKAA      430      440      450
***** :
gi|260 VTVDSTMIATSPFEFGMGWAGLGAKEISGAE      420      430      440      450

455 residues in 1 query sequences
Scomplib [34+26]
start: Fri Jan 22 19:56:10 2010 done: Fri Jan 22 20:10:35 2010
Total Scan time: 691.790 Total Display time: 16.320

Function used was FASTA [version 3.4t26 July 7, 2006]
```

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Database checksum values:
Fri Jan 22 19:50:56 GMT 2010      a184245745a6edc8c6ecd45b26637bba
/genedata/1/db/AD_2010
Fri Jan 22 19:50:56 GMT 2010      17c3a19148dfb0163e270cf41e2aa437
/genedata/1/db/TOX_2010
Fri Jan 22 20:11:50 GMT 2010      e657d3127c1aad11f9f7df8dcc5e448c
/genedata/1/db/PRT_2010
```