AvHPPD-03: Assessment of Amino Acid Sequence Similarity to Known or Putative Allergens

Final Report

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AUTHOR(S): [redacted]

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PERFORMING LABORATORY: Syngenta Crop Protection, LLC
3054 East Cornwallis Road
Research Triangle Park, NC 27709-2257 USA

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SUBMITTER:
Syngenta Seeds, Inc.
3054 East Cornwallis Road
Post Office Box 12257
Research Triangle Park, NC 27709-2257 USA

SPONSOR:
Syngenta Crop Protection, LLC
410 Swing Road
Post Office Box 18300
Greensboro, NC 27419-8300 USA

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Company: *Syngenta Seeds, Inc.*

Company Representative:

[redacted] April 2, 2012

Date

Manager, Regulatory Affairs

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This is not a study as defined by 40 CFR Part 160.3 and is therefore not subject to Federal Insecticide, Fungicide, and Rodenticide Act Good Laboratory Practice Standards (GLPS). However, all components of this analysis were performed according to accepted scientific practices, and relevant records have been retained.

Study Director:

[redacted] April 3, 2012

Date

Technical Expert, Product Safety
Syngenta Crop Protection, LLC

Submitted by:

[redacted] April 2, 2012

Date

Manager, Regulatory Affairs
Syngenta Seeds, Inc.
3054 East Cornwallis Road
PO Box 12257
Research Triangle Park, NC 27709-2257 USA

Sponsor:

[redacted] 4/3/12

Date

Technical Leader, Product Safety
Syngenta Crop Protection, LLC
410 Swing Road
Post Office Box 18300
Greensboro, NC 27419-8300 USA

GENERAL INFORMATION

Contributors

The following contributed to this report in the capacities indicated:

Name	Title
[redacted]	Study Director, Syngenta Crop Protection, LLC

Records Retention

Raw data, the original copy of this report, and other relevant records are archived at Syngenta, 3054 East Cornwallis Road, Research Triangle Park, NC 27709-2257, USA

TABLE OF CONTENTS

STATEMENT OF DATA CONFIDENTIALITY CLAIMS **2**

GOOD LABORATORY PRACTICE COMPLIANCE STATEMENT **3**

GENERAL INFORMATION **4**

TABLE OF CONTENTS **5**

LIST OF FIGURES **6**

1.0 EXECUTIVE SUMMARY **8**

2.0 INTRODUCTION **9**

3.0 MATERIALS AND METHODS **9**

3.1 Allergen Database Searches 9

3.2 Assessment of Alignment Significance 10

4.0 RESULTS AND DISCUSSION **10**

5.0 CONCLUSIONS **11**

6.0 REFERENCES **12**

APPENDICES SECTION **13**

APPENDIX A Protein sequences included in the FARRP AllergenOnline database, version 12 14

APPENDIX B FASTA Search Alignments 102

LIST OF FIGURES

FIGURE 1 Amino acid sequence of AvHPPD-03.....10

LIST OF ACRONYMS AND ABBREVIATIONS

aa	amino acid
avhppd-03	oat derived p-hydroxyphenylpyruvate dioxygenase gene
AvHPPD-03	oat derived p-hydroxyphenylpyruvate dioxygenase protein
BLOSUM50	Blocks Substitution Matrix50
FARRP	Food Allergy Research and Resource Program
FASTA	DNA and protein sequence alignment software package
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
GLPS	Good Laboratory Practice Standards
NCBI	National Center for Biotechnology Information
US EPA	United States Environmental Protection Agency
®	registered trademark

1.0 EXECUTIVE SUMMARY

AvHPPD-03 is a *p*-hydroxyphenylpyruvate dioxygenase enzyme that is involved in the production of plastoquinones, which are required for plant carotenoid biosynthesis. Transgenic soybean plants expressing *avhppd-03* derived from the *hppd* gene from oat (*Avena sativa*) exhibit a mesotrione-tolerance phenotype. To determine whether or not the AvHPPD-03 amino acid sequence showed biologically relevant amino acid sequence similarity to known or putative allergens, two different searches were performed against the Food Allergy Research and Resource Program (FARRP 2012) protein AllergenOnline database, version 12, which contained 1,603 amino acid sequences of known and putative allergens. A full-length sequence search using FASTA and a search for exact matches of eight or more contiguous amino acids when compared to each of the known or putative allergen sequences were used in the assessment. In the first search, no sequence similarity greater than 35% shared identity over 80 amino acids or more was observed between the AvHPPD-03 amino acid sequence and any entry in the FARRP AllergenOnline database. In the second search, no matches of eight or more contiguous amino acids were observed between the AvHPPD-03 amino acid sequence and sequences in the FARRP AllergenOnline database. These results support the conclusion that AvHPPD-03 shares no biologically relevant amino acid sequence similarity to known or putative protein allergens.

2.0 INTRODUCTION

The purpose of this analysis was to determine whether the oat derived *p*-hydroxyphenylpyruvate dioxygenase protein (AvHPPD-03) has biologically relevant amino acid sequence similarity to known or putative protein allergens.

The AvHPPD-03 protein is a *p*-hydroxyphenylpyruvate dioxygenase enzyme that is involved in the production of plastoquinones, which are required for plant carotenoid biosynthesis. Transgenic soybean plants expressing *avhppd-03* derived from the *hppd* gene from oat (*Avena sativa*) exhibit a mesotrione-tolerance phenotype.

The AvHPPD-03 amino acid sequence was systematically compared against the protein sequences in the Food Allergy Research and Resource Program (FARRP) AllergenOnline database, version 12 (FARRP 2012).

3.0 MATERIALS AND METHODS

3.1 Allergen Database Searches

The FARRP AllergenOnline database (2012) contains the amino acid sequences of known and putative protein allergens. It is a curated, peer-reviewed database containing proteins identified as food allergens, respiratory allergens, allergenic venom proteins, contact allergens, gliadins, and glutenins. Entries were compiled primarily from searches of publicly available protein databases using the National Center for Biotechnology Information (NCBI 2011) Entrez® search and retrieval system. The NCBI dataset was screened by searches for entries associated with allergy or celiac disease; duplicate entries were removed, and additional entries were identified from publications. The list of candidate entries was then reviewed by an international panel of allergy experts who reviewed published clinical and laboratory evidence to support the candidate sequences as allergens. Proteins are classified as known or putative allergens according to predetermined criteria set by the FARRP expert review panel. The latest version of the FARRP AllergenOnline database (2012) contains 1,603 nonredundant entries (Appendix A).

Similarity searches were performed using an exact copy of the entire list of sequences in the current version of the FARRP AllergenOnline database (2012) (maintained at Syngenta Crop Protection, LLC, Research Triangle Park, NC, USA). Two different sequence searches were performed in order to compare the amino acid sequence of AvHPPD-03 (439 amino acids, Figure 1) with sequences in the FARRP AllergenOnline database (2012).

FIGURE 1 Amino acid sequence of AvHPPD-03

```
  1 MPPTPATATG AAAAAVTPEH AARSFPRVVR VNPRSDRFPV LSFHHVELWC ADAASAAGRF
 61 SFALGAPLAA RSDLSTGNSA HASLLLRSGA LAFLFTAPYA PPPQEAATAA TASIPSFSAD
121 AARTFAAAHG LAVRSVGVRV ADAAEAFRVS VAGGARPAFA PADLGHGFGL AEVELYGDVV
181 LRFVSYPDET DLPFLPGFER VSSPGAVDYG LTRFDHVVGN VPEMAPVIDY MKGFLGFHEF
241 AEFTAEDVGT TESGLNSVVL ANNSEAVLLP LNEPVHGTKR RSQIQTYLEY HGGPGVQHIA
301 LASNDVLRTL REMRARTPMG GFEFMAPPQA KYYEGVRRIA GDVLSEEQIK ECQELGVLVD
361 RDDQGVLLQI FTKPVGDRPT FFLEMIQRIG CMEKDEVGQE YQKGGCGGFG KGNFSELFKS
421 IEDYEKSLEV KQSVVAQKS
```

In the first search, the FASTA search algorithm, version 3.45 (Pearson and Lipman 1988), was used to assess overall sequence similarity by conducting a search of the entire AvHPPD-03 amino acid sequence with the sequences in the FARRP AllergenOnline database (2012). The default FASTA settings used include an extension penalty of two and gap creation penalty of 12. The scoring matrix for FASTA was the Blocks Substitution Matrix50 (BLOSUM50). The BLOSUM50 matrix is weighted to favor identical amino acids likely to impact protein structure.

In the second search, the AvHPPD-03 amino acid sequence was screened for matches of eight or more contiguous amino acids (Hileman *et al*. 2002) using a program developed by Syngenta; this program compared every possible peptide of eight contiguous amino acids in the query sequence with the sequences in the FARRP AllergenOnline database (2012).

3.2 Assessment of Alignment Significance

The FASTA search produces localized alignments between the entire AvHPPD-03 amino acid sequence and the sequences in the allergen database. The evaluation of each resulting alignment utilizes the minimum criterion of at least 80 amino acids of alignment length with greater than 35% shared amino acid identity over the alignment length. Any alignments exceeding these criteria for shared sequence similarity indicate the potential for immunologically relevant sequence similarity (Codex Alimentarius Commission 2009).

Additionally, any match of eight (or more) identical contiguous amino acids between the AvHPPD-03 amino acid sequence, and any sequence in the allergen database, could indicate the potential for immunologically relevant sequence similarity. However, it should be noted that this specific search has been challenged due to high level of false positives and therefore results should be carefully considered (Goodman *et al*. 2008, Silvanovich *et al*. 2006).

4.0 RESULTS AND DISCUSSION

No significant sequence similarity was observed between the AvHPPD-03 amino acid sequence and any entry in the FARRP AllergenOnline database (2012) (Appendix B). Moreover, no matches were observed between any sequence of eight or more contiguous amino acids of AvHPPD-03 and any entry in the FARRP AllergenOnline database (2012).

5.0 CONCLUSIONS

This study supports the conclusion that AvHPPD-03 shows no biologically relevant amino acid sequence similarity to any known or putative protein allergens.

6.0 REFERENCES

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APPENDICES SECTION

APPENDIX A Protein sequences included in the FARRP AllergenOnline database, version 12

The GenInfo identifier is a number assigned to a nucleotide or protein sequence and used to differentiate reported sequence variations within an entry.

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1	*Acarus siro*	Mite	Unassigned	allergen Aca s 13 [Acarus siro]	118638268
2	*Actinidia chinensis*	Kiwi	Unassigned	RecName: Full=Actinidain; Short=Actinidin; AltName: Allergen=Act c 1; Flags: Precursor	190358935
3	*Actinidia chinensis*	Kiwi	Unassigned	bet v 1 related allergen [Actinidia chinensis]	281552896
4	*Actinidia chinensis*	Kiwi	Unassigned	Kiwellin (Allergen Act c ?)	85701136
5	*Actinidia chinensis*	Kiwi	Unassigned	Thaumatin-like protein (Allergen Act c 2)	68064399
6	*Actinidia deliciosa*	Kiwi	Unassigned	RecName: Full=Actinidain; Short=Actinidin; AltName: Full=Allergen Act d 1; AltName: Allergen=Act d 1; Flags: Precursor	193806686
7	*Actinidia deliciosa*	Kiwi	Unassigned	actinidin	166317
8	*Actinidia deliciosa*	Kiwi	Unassigned	unnamed protein product [Actinidia deliciosa]	15984
9	*Actinidia deliciosa*	Kiwi	Unassigned	bet v 1 related allergen [Actinidia deliciosa]	281552898
10	*Actinidia deliciosa*	Kiwi	Unassigned	RecName: Full=Kirola; AltName: Allergen=Act d 11	332319679
11	*Actinidia deliciosa*	Kiwi	Unassigned	phytocystatin [Actinidia deliciosa]	40807635
12	*Actinidia deliciosa*	Kiwi	Unassigned	thaumatin-like protein [Actinidia deliciosa]	146737976
13	*Actinidia deliciosa*	Kiwi	Act c 2	thaumatin-like protein [Actinidia deliciosa]	71057064

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
14	*Aedes aegypti*	Yellow fever mosquito	Aed a 2	RecName: Full=37 kDa salivary gland allergen Aed a 2; AltName: Full=Protein D7; AltName: Allergen=Aed a 2; Flags: Precursor	205525919
15	*Aedes aegypti*	Yellow fever mosquito	Aed a 2	D7 protein precursor (Allergen Aed a 2)	118216
16	*Aedes aegypti*	Yellow fever mosquito	Unassigned	30 kDa salivary gland allergen variant 3 [Aedes aegypti]	94468552
17	*Aedes aegypti*	Yellow fever mosquito	Unassigned	30 kDa salivary gland allergen variant 2 [Aedes aegypti]	94468546
18	*Aedes aegypti*	Yellow fever mosquito	Unassigned	30 kDa salivary gland allergen Aed a 3 [Aedes aegypti]	2114497
19	*Aedes aegypti*	Yellow fever mosquito	Unassigned	RecName: Full=Apyrase; AltName: Full=Adenosine diphosphatase; AltName: Full=ATP-diphosphohydrolase; AltName: Full=ATP-diphosphatase; Short=ADPase; AltName: Allergen=Aed a 1; Flags: Precursor	193806340
20	*Aedes aegypti*	Yellow fever mosquito	Aed a 1	apyrase	556272
21	*Agrostis alba*	Bent grass	Unassigned	Group I allergen Agr a I (Form 2), pollen	75139987
22	*Agrostis alba*	Bent grass	Unassigned	Group I allergen Agr a I (Form 1), pollen	75139989
23	*Agrostis alba*	Bent grass	Unassigned	pollen allergen Agr a I - bent grass (fragment)	320606
24	*Alnus glutinosa*	Alder	Aln g 1	Aln g I [Alnus glutinosa]	261407
25	*Alnus glutinosa*	Alder	Unassigned	pollen allergen Aln g 4 [Alnus glutinosa]	3319651

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
26	*Alternaria alternata*	Fungus	Unassigned	aldehyde dehydrogenase (NAD+) [Alternaria alternata]	76666767
27	*Alternaria alternata*	Fungus	Unassigned	RecName: Full=Glutathione-S-transferase; AltName: Allergen=Alt a 13	74611808
28	*Alternaria alternata*	Fungus	Unassigned	major allergen Alt a 1 subunit [Alternaria alternata]	45680856
29	*Alternaria alternata*	Fungus	Alt a 1	major allergen alt a1 [Alternaria alternata]	21913174
30	*Alternaria alternata*	Fungus	Alt a 1	major allergen Alt a 1 subunit [Alternaria alternata]	1842045
31	*Alternaria alternata*	Fungus	Alt a 6	Enolase (2-phosphoglycerate dehydratase) (2-phospho-D-glycerate hydro-lyase) (Major allergen Alt a 11) (Alt a XI)	14423684
32	*Alternaria alternata*	Fungus	Unassigned	Minor allergen Alt a 7 (Alt a VII)	1168402
33	*Alternaria alternata*	Fungus	Alt a 3	Heat shock 70 kDa protein (Allergen Alt a 3)	14423730
34	*Alternaria alternata*	Fungus	Unassigned	RecName: Full=Superoxide dismutase [Mn], mitochondrial; AltName: Full=Manganese-dependent superoxide dismutase; Short=MnSOD; AltName: Allergen=Alt a MnSOD	292630881
35	*Alternaria alternata*	Fungus	Unassigned	putative nuclear transport factor 2 [Alternaria alternata]	21748153
36	*Alternaria alternata*	Fungus	Alt a 12	60S acidic ribosomal protein P1 (Allergen Alt a 12) (Alt a XII)	1350779

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
37	*Alternaria alternata*	Fungus	Unassigned	RecName: Full=60S acidic ribosomal protein P2; AltName: Full=Minor allergen Alt a 5; AltName: Full=Allergen Alt a 6; AltName: Full=Allergen Alt a VI; AltName: Allergen=Alt a 5	1173071
38	*Alternaria alternata*	Fungus	Alt a 5	ribosomal P2 phosphoprotein [Alternaria alternata]	1850540
39	*Alternaria alternata*	Fungus	Unassigned	TCTP [Alternaria alternata]	112824341
40	*Alternaria alternata*	Fungus	Alt a 4	Protein disulfide-isomerase (PDI) (Allergen Alt a 4)	85701160
41	*Amaranthus retroflexus*	Common Amaranth	Unassigned	Ama r 2 pollen allergen [Amaranthus retroflexus]	227937304
42	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	putative pectate lyase precursor [Ambrosia artemisiifolia]	302127828
43	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	putative pectate lyase precursor [Ambrosia artemisiifolia]	302127826
44	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	putative pectate lyase precursor [Ambrosia artemisiifolia]	302127824
45	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	putative pectate lyase precursor [Ambrosia artemisiifolia]	302127822
46	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	putative pectate lyase precursor [Ambrosia artemisiifolia]	302127820
47	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	putative pectate lyase precursor [Ambrosia artemisiifolia]	302127818
48	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	putative pectate lyase precursor [Ambrosia artemisiifolia]	302127816
49	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	putative pectate lyase precursor [Ambrosia artemisiifolia]	302127814
50	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	putative pectate lyase precursor [Ambrosia artemisiifolia]	302127812

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
51	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	putative pectate lyase precursor [Ambrosia artemisiifolia]	302127810
52	*Ambrosia artemisiifolia*	Short ragweed	Amb a 1.3	antigen E	166443
53	*Ambrosia artemisiifolia*	Short ragweed	Amb a 1.4	Pollen allergen Amb a 1.4 precursor (Antigen E) (Antigen Amb a I)	113478
54	*Ambrosia artemisiifolia*	Short ragweed	Amb a 1.3	Pollen allergen Amb a 1.3 precursor (Antigen E) (Antigen Amb a I)	113477
55	*Ambrosia artemisiifolia*	Short ragweed	Amb a 1.2	Pollen allergen Amb a 1.2 precursor (Antigen E) (Antigen Amb a I) (AaBA protein)	113476
56	*Ambrosia artemisiifolia*	Short ragweed	Amb a 1.1	Pollen allergen Amb a 1.1 precursor (Antigen E) (AgE) (Antigen Amb a I)	113475
57	*Ambrosia artemisiifolia*	Short ragweed	Amb a 2	Pollen allergen Amb a 2 precursor (Antigen K) (Antigen Amb a II)	113479
58	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	ragweed homologue of Art v 1 precursor [Ambrosia artemisiifolia]	291482318
59	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	ragweed homologue of Art v 1 precursor [Ambrosia artemisiifolia]	291482316
60	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	ragweed homologue of Art v 1 precursor [Ambrosia artemisiifolia]	291482314
61	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	ragweed homologue of Art v 1 precursor [Ambrosia artemisiifolia]	291482310
62	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	ragweed homologue of Art v 1 precursor [Ambrosia artemisiifolia]	291482308
63	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	ragweed homologue of Art v 1 precursor [Ambrosia artemisiifolia]	291482306
64	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	ragweed homologue of Art v 1 precursor [Ambrosia artemisiifolia]	291197394
65	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	ragweed homologue of Art v 1 precursor [Ambrosia artemisiifolia]	285005079

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
66	*Ambrosia artemisiifolia*	Short ragweed	Amb a 6	Nonspecific lipid-transfer protein precursor (LTP) (Pollen allergen Amb a 6) (Amb a VI) (Allergen Ra6)	14285595
67	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	profilin isoallergen 2 [Ambrosia artemisiifolia]	62249512
68	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	profilin isoallergen 1 [Ambrosia artemisiifolia]	62249502
69	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	profilin-like protein [Ambrosia artemisiifolia]	34851178
70	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	profilin-like protein [Ambrosia artemisiifolia]	34851180
71	*Ambrosia artemisiifolia*	Short ragweed	Unassigned	profilin-like protein [Ambrosia artemisiifolia]	34851182
72	*Ambrosia artemisiifolia (elatior)*	Short ragweed	Amb a 3	Pollen allergen Amb a 3 (Amb a III) (Allergen Ra3)	416636
73	*Ambrosia artemisiifolia (elatior)*	Short ragweed	Amb a 5	Pollen allergen Amb a 5 (Amb a V) (Allergen Ra5)	114090
74	*Ambrosia psilostachya*	Western ragweed	Unassigned	Amb p V allergen	515957
75	*Ambrosia psilostachya*	Western ragweed	Unassigned	Amb p V allergen	515956
76	*Ambrosia psilostachya*	Western ragweed	Unassigned	Amb p V allergen	515955
77	*Ambrosia psilostachya*	Western ragweed	Unassigned	Amb p V allergen	515954
78	*Ambrosia psilostachya*	Western ragweed	Unassigned	Amb p V allergen	515953
79	*Ambrosia trifida*	Giant ragweed	Amb t 5	Pollen allergen Amb t 5 precursor (Amb t V) (Allergen Ra5G)	114091
80	*Anacardium occidentale*	Cashew	Ana o 1	vicilin-like protein [Anacardium occidentale]	21914823

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
81	*Anacardium occidentale*	Cashew	Ana o 1	vicilin-like protein [Anacardium occidentale]	21666498
82	*Anacardium occidentale*	Cashew	Ana o 2	allergen Ana 0 2 [Anacardium occidentale]	25991543
83	*Anacardium occidentale*	Cashew	Ana o 3	2s albumin [Anacardium occidentale]	24473800
84	*Ananas comosus*	Pineapple	Unassigned	Bromelain precursor (Allergen Ana c 2)	75277440
85	*Ananas comosus*	Pineapple	Unassigned	RecName: Full=Profilin; AltName: Full=Minor food allergen Ana c 1; AltName: Allergen=Ana c 1	75306610
86	*Anisakis simplex*	Parasitic fish worm	Ani s 1	Major allergen Ani s 1 precursor (Excretory gland allergen Ans1) (21 kDa allergen)	47605452
87	*Anisakis simplex*	Parasitic fish worm	Unassigned	Ani s 11-like protein 2 precursor [Anisakis simplex]	323575365
88	*Anisakis simplex*	Parasitic fish worm	Unassigned	Ani s 11-like protein precursor [Anisakis simplex]	323575363
89	*Anisakis simplex*	Parasitic fish worm	Unassigned	Ani s 11 allergen precursor [Anisakis simplex]	323575361
90	*Anisakis simplex*	Parasitic fish worm	Unassigned	Ani s 12 allergen precursor [Anisakis simplex]	323575367
91	*Anisakis simplex*	Parasitic fish worm	Unassigned	Paramyosin (Allergen Ani s 2)	42559536
92	*Anisakis simplex*	Parasitic fish worm	Ani s 2	paramyosin isoform [Anisakis simplex]	8453086
93	*Anisakis simplex*	Parasitic fish worm	Unassigned	ani s 4 allergen [Anisakis simplex]	110346534
94	*Anisakis simplex*	Parasitic fish worm	Ani s 4	Allergen Ani s 4	47605398

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
95	*Anisakis simplex*	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein [Anisakis simplex]	121308878
96	*Anisakis simplex*	Parasitic fish worm	Unassigned	UA3-recognized allergen [Anisakis simplex]	119524036
97	*Anisakis simplex*	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 10 [Anisakis simplex]	155676698
98	*Anisakis simplex*	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 9 [Anisakis simplex]	155676696
99	*Anisakis simplex*	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 8 [Anisakis simplex]	155676694
100	*Anisakis simplex*	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 7 [Anisakis simplex]	155676692
101	*Anisakis simplex*	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 6 [Anisakis simplex]	155676690
102	*Anisakis simplex*	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 5 [Anisakis simplex]	155676688
103	*Anisakis simplex*	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 4 [Anisakis simplex]	155676686
104	*Anisakis simplex*	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 3 [Anisakis simplex]	155676684
105	*Anisakis simplex*	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 2 [Anisakis simplex]	155676682
106	*Anisakis simplex*	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 1 [Anisakis simplex]	155676636
107	*Anisakis simplex*	Parasitic fish worm	Unassigned	Ani s 9 allergen precursor [Anisakis simplex]	157418806
108	*Anisakis simplex*	Parasitic fish worm	Unassigned	troponin-like protein [Anisakis simplex]	6065738
109	*Anthoxanthum odoratum*	Sweet vernal grass	Unassigned	Group I allergen Ant o I (Form 2), pollen	75139990

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
110	*Anthoxanthum odoratum*	Sweet vernal grass	Unassigned	Group I allergen Ant o I (Form 1), pollen	75139986
111	*Anthoxanthum odoratum*	Sweet vernal grass	Unassigned	pollen allergen Ant o I - sweet vernal grass (fragment)	320607
112	*Apis cerana*	Indian honeybee	Unassigned	phospholipase A2 (EC 3.1.1.4), venom - Indian honeybee	7435005
113	*Apis cerana cerana*	Indian honeybee	Unassigned	Phospholipase A2 (Phosphatidylcholine 2-acylhydrolase)	24638082
114	*Apis dorsata*	Giant honeybee	Unassigned	Phospholipase A2 (Phosphatidylcholine 2-acylhydrolase)	47117012
115	*Apis dorsata*	Giant honeybee	Unassigned	Melittin	126955
116	*Apis mellifera*	Honeybee	Api m 1	Phospholipase A2 precursor (Phosphatidylcholine 2-acylhydrolase) (Allergen Api m 1) (Api m I)	24418862
117	*Apis mellifera*	Honeybee	Api m 2	Hyaluronoglucosaminidase precursor (Hyaluronidase) (Hya) (Allergen Api m 2) (Api m II)	585279
118	*Apis mellifera*	Honeybee	Unassigned	venom acid phosphatase precursor [Apis mellifera]	60652325
119	*Apis mellifera*	Honeybee	Unassigned	venom acid phosphatase [Apis mellifera]	208342441
120	*Apis mellifera*	Honeybee	Unassigned	Melittin precursor (Allergen Api m 3) (Api m III)	126949
121	*Apis mellifera*	Honeybee	Unassigned	melittin, minor - honeybee	69552
122	*Apis mellifera*	Honeybee	Unassigned	RecName: Full=Venom dipeptidyl peptidase 4; AltName: Full=Allergen C; AltName: Full=Venom dipeptidyl peptidase IV; AltName: Allergen=Api m 5; Flags: Precursor	313471719
123	*Apis mellifera*	Honeybee	Unassigned	allergen Api m 6 variant 2 precursor [Apis mellifera]	88770352

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
124	*Apis mellifera*	Honeybee	Unassigned	allergen Api m 6 variant 1 [Apis mellifera]	94400907
125	*Apis mellifera*	Honeybee	Unassigned	icarapin variant 2 precursor [Apis mellifera]	94471624
126	*Apis mellifera*	Honeybee	Unassigned	icarapin variant 1 precursor [Apis mellifera]	94471622
127	*Apium graveolens*	Celery	Api g 1.0201	Major allergen Api g 2 (Api g 1.0201)	14423646
128	*Apium graveolens*	Celery	Api g 1.0101	Major allergen Api g 1 (Api g 1.0101) (Api g I)	1346568
129	*Apium graveolens*	Celery	Api g 2.0101	stalk non-specific lipid-transfer protein 1 [Apium graveolens]	256600126
130	*Apium graveolens*	Celery	Api g 4	profilin [Apium graveolens]	4761578
131	*Apium graveolens*	Celery	Unassigned	[Segment 4 of 4] Allergen Api g 5	32363126
132	*Apium graveolens*	Celery	Unassigned	[Segment 3 of 4] Allergen Api g 5	32363125
133	*Apium graveolens*	Celery	Unassigned	[Segment 2 of 4] Allergen Api g 5	32363124
134	*Apium graveolens*	Celery	Unassigned	[Segment 1 of 4] Allergen Api g 5	33300921
135	*Arachis hypogaea*	Peanut	Unassigned	peanut agglutinin precursor; prePNA [Arachis hypogaea]	253289
136	*Arachis hypogaea*	Peanut	Unassigned	Ara h 1 allergen [Arachis hypogaea]	312233063
137	*Arachis hypogaea*	Peanut	Unassigned	conarachin [Arachis hypogaea]	46560476
138	*Arachis hypogaea*	Peanut	Unassigned	conarachin [Arachis hypogaea]	46560472
139	*Arachis hypogaea*	Peanut	Unassigned	conarachin [Arachis hypogaea]	46560474
140	*Arachis hypogaea*	Peanut	Ara h 1	Allergen Ara h 1, clone P41B precursor (Ara h I)	1168391
141	*Arachis hypogaea*	Peanut	Ara h 1	Allergen Ara h 1, clone P17 precursor (Ara h I)	1168390
142	*Arachis hypogaea*	Peanut	Unassigned	Ara h 2.01 allergen [Arachis hypogaea]	224747150
143	*Arachis hypogaea*	Peanut	Unassigned	allergen II [Arachis hypogaea]	15418705

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
144	*Arachis hypogaea*	Peanut	Ara h 2	allergen Ara h 2 isoform [Arachis hypogaea]	31322017
145	*Arachis hypogaea*	Peanut	Ara h 2.02	allergen Ara h 2.02 [Arachis hypogaea]	26245447
146	*Arachis hypogaea*	Peanut	Unassigned	profilin [Arachis hypogaea]	284810529
147	*Arachis hypogaea*	Peanut	Ara h 5	profilin [Arachis hypogaea]	5902968
148	*Arachis hypogaea*	Peanut	Unassigned	RecName: Full=Conglutin; AltName: Allergen=Ara h 6; Flags: Precursor	75114094
149	*Arachis hypogaea*	Peanut	Unassigned	Chain A, Allergen Arah6 From Peanut (Arachis Hypogaea)	159163254
150	*Arachis hypogaea*	Peanut	Unassigned	conglutin [Arachis hypogaea]	17225991
151	*Arachis hypogaea*	Peanut	Ara h 6	allergen Arah6 [Arachis hypogaea]	5923742
152	*Arachis hypogaea*	Peanut	Unassigned	Ara h 7 allergen precursor [Arachis hypogaea]	158121995
153	*Arachis hypogaea*	Peanut	Ara h 7	allergen [Arachis hypogaea]	5931948
154	*Arachis hypogaea*	Peanut	Unassigned	pathogenesis-related protein 10 [Arachis hypogaea]	110676574
155	*Arachis hypogaea*	Peanut	Unassigned	Ara h 8 allergen isoform 3 [Arachis hypogaea]	169786740
156	*Arachis hypogaea*	Peanut	Unassigned	Ara h 8 allergen isoform [Arachis hypogaea]	145904610
157	*Arachis hypogaea*	Peanut	Ara h 8	Ara h 8 allergen [Arachis hypogaea]	37499626
158	*Arachis hypogaea*	Peanut	Unassigned	LTP isoallergen 2 [Arachis hypogaea]	161610580
159	*Arachis hypogaea*	Peanut	Unassigned	LTP isoallergen 1 precursor [Arachis hypogaea]	161087230
160	*Arachis hypogaea*	Peanut	Unassigned	Ara h 3 allergen [Arachis hypogaea]	312233065
161	*Arachis hypogaea*	Peanut	Unassigned	Chain A, Crystal Structure Of Peanut Major Allergen Ara H 3	224036293
162	*Arachis hypogaea*	Peanut	Unassigned	arachin Arah3 isoform [Arachis hypogaea]	199732457
163	*Arachis hypogaea*	Peanut	Unassigned	iso-Ara h3 [Arachis hypogaea]	112380623
164	*Arachis hypogaea*	Peanut	Unassigned	trypsin inhibitor [Arachis hypogaea]	22135348

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
165	*Arachis hypogaea*	Peanut	Unassigned	allergen Arah3/Arah4 [Arachis hypogaea]	21314465
166	*Arachis hypogaea*	Peanut	Ara h 4	glycinin [Arachis hypogaea]	5712199
167	*Arachis hypogaea*	Peanut	Ara h 3	glycinin [Arachis hypogaea]	3703107
168	*Argas reflexus*	European pigeon tick	Unassigned	Chain A, Crystal Structure Of Arg R 1 In Complex With Histamine	322812205
169	*Argas reflexus*	European pigeon tick	Arg r 1	Arg r 1 precursor [Argas reflexus]	58371884
170	*Artemisia vulgaris*	Mugwort	Unassigned	Amb a 1-like protein [Artemisia vulgaris]	62530263
171	*Artemisia vulgaris*	Mugwort	Art v 1	major pollen allergen Art v 1 precursor [Artemisia vulgaris]	27818335
172	*Artemisia vulgaris*	Mugwort	Unassigned	art v 2 allergen [Artemisia vulgaris]	148887203
173	*Artemisia vulgaris*	Mugwort	Unassigned	Art v 3 allergen precursor [Artemisia vulgaris]	189544595
174	*Artemisia vulgaris*	Mugwort	Unassigned	Art v 3.0301 allergen precursor [Artemisia vulgaris]	189544590
175	*Artemisia vulgaris*	Mugwort	Unassigned	Art v 3 allergen precursor [Artemisia vulgaris]	189544584
176	*Artemisia vulgaris*	Mugwort	Unassigned	Art v 3.0201 allergen precursor [Artemisia vulgaris]	189544578
177	*Artemisia vulgaris*	Mugwort	Unassigned	Nonspecific lipid-transfer protein (LTP) (Pollen allergen Art v 3)	73621307
178	*Artemisia vulgaris*	Mugwort	Unassigned	Profilin-2 (Pollen allergen Art v 4.02)	73621416
179	*Artemisia vulgaris*	Mugwort	Unassigned	Profilin-1 (Pollen allergen Art v 4.01)	73621415
180	*Arthroderma benhamiae*	Fungus	Unassigned	tri m 2 allergen [Arthroderma benhamiae]	23894244
181	*Arthroderma benhamiae*	Fungus	Unassigned	tri m 2 allergen [Arthroderma benhamiae]	23894240

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
182	*Arthroderma benhamiae*	Fungus	Unassigned	tri m 4 allergen [Arthroderma benhamiae]	23894232
183	*Arthroderma vanbreuseghemii*	Fungus	Unassigned	allergen [Arthroderma vanbreuseghemii]	219687753
184	*Ascaris lumbricoides*	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735104
185	*Ascaris lumbricoides*	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735100
186	*Ascaris lumbricoides*	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735118
187	*Ascaris lumbricoides*	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735114
188	*Ascaris lumbricoides*	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735112
189	*Ascaris lumbricoides*	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735110
190	*Ascaris lumbricoides*	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735108
191	*Ascaris lumbricoides*	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735106
192	*Ascaris lumbricoides*	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735102
193	*Ascaris lumbricoides*	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735098
194	*Ascaris lumbricoides*	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735096
195	*Ascaris lumbricoides*	Parasitic roundworm	Unassigned	tropomyosin [Ascaris lumbricoides]	224016002
196	*Ascaris suum*	Parasitic roundworm	Unassigned	Chain A, The Solution Structure Of Aba-1a Saturated With Oleic Acid	343197079

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
197	*Ascaris suum*	Parasitic roundworm	Asc s 1	ABA-1 polyprotein precursor (Body fluid allergen 1) (Allergen Asc s 1) (Nematode polyprotein allergen ABA-1) (NPA ABA-1) [Contains: ABA-1B1 repeat unit; ABA-1A4 repeat unit; ABA-1A3 repeat unit; ABA-1A2 repeat unit; ABA-1A1 repeat unit; C-terminal extensi	77416849
198	*Ascaris suum*	Parasitic roundworm	Asc s 1	major allergen ABA-1=TBA-1 allergen homolog {N-terminal} [Ascaris suum, pseudocoelomic body fluid, Peptide Partial, 68 aa]	299550
199	*Aspergillus flavus*	Fungus	Unassigned	Allergen Asp fl 1	74665726
200	*Aspergillus fumigatus*	Fungus	Unassigned	Ribonuclease mitogillin precursor (Major allergen Asp f 1) (Asp f I) (Allergen I/a) (IgE-binding ribotoxin)	54039254
201	*Aspergillus fumigatus*	Fungus	Asp f 1	major allergen I 18kDa antigen [Aspergillus fumigatus]	9280360
202	*Aspergillus fumigatus*	Fungus	Asp f 1	Aspf1 allergen [Aspergillus fumigatus]	3021324
203	*Aspergillus fumigatus*	Fungus	Asp f 10	aspergillopepsin i [Aspergillus fumigatus]	963013
204	*Aspergillus fumigatus*	Fungus	Asp f 11	PPIase [Aspergillus fumigatus]	5019414
205	*Aspergillus fumigatus*	Fungus	Asp f 12	Heat shock protein 90 (Heat shock protein hsp1) (65 kDa IgE-binding protein) (Allergen Asp f 12)	83303658
206	*Aspergillus fumigatus*	Fungus	Asp f 2	Major allergen Asp f 2 precursor (Asp f II)	83300352
207	*Aspergillus fumigatus*	Fungus	Asp f 2	Asp FII [Aspergillus fumigatus]	664852
208	*Aspergillus fumigatus*	Fungus	Unassigned	Enolase (2-phosphoglycerate dehydratase) (2-phospho-D-glycerate hydro-lyase) (Allergen Asp f 22)	83288046

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
209	*Aspergillus fumigatus*	Fungus	Asp f 22	enolase [Aspergillus fumigatus]	13925873
210	*Aspergillus fumigatus*	Fungus	Asp f 3	peroxisomal-like protein [Aspergillus fumigatus]	2769700
211	*Aspergillus fumigatus*	Fungus	Unassigned	Allergen Asp f 4 precursor	83300369
212	*Aspergillus fumigatus*	Fungus	Asp f 4	rAsp f 4 [Aspergillus fumigatus]	3005839
213	*Aspergillus fumigatus*	Fungus	Unassigned	Superoxide dismutase [Mn], mitochondrial precursor (Allergen Asp f 6)	83305645
214	*Aspergillus fumigatus*	Fungus	Asp f 6	manganese superoxide dismutase [Aspergillus fumigatus]	1648970
215	*Aspergillus fumigatus*	Fungus	Asp f 7	Allergen Asp f 7 precursor	83300389
216	*Aspergillus fumigatus*	Fungus	Unassigned	60S acidic ribosomal protein P2 (Allergen Asp f 8) (AfP2)	83305635
217	*Aspergillus fumigatus*	Fungus	Asp f 8	rAsp f 8 [Aspergillus fumigatus]	6686524
218	*Aspergillus fumigatus*	Fungus	Unassigned	Probable glycosidase crf1 precursor (Crh-like protein) (Allergen Asp f 9)	85540942
219	*Aspergillus fumigatus*	Fungus	Unassigned	60S ribosomal protein L3 (Allergen Asp f 23)	83305621
220	*Aspergillus fumigatus*	Fungus	Unassigned	large subunit ribosomal protein L3 [Aspergillus fumigatus]	21215170
221	*Aspergillus fumigatus*	Fungus	Unassigned	cellular serine proteinase [Aspergillus fumigatus]	2143220
222	*Aspergillus fumigatus Af293*	Fungus	Unassigned	major allergen Asp F2 [Aspergillus fumigatus Af293]	66849502
223	*Aspergillus fumigatus Af293*	Fungus	Unassigned	allergen Asp F3 [Aspergillus fumigatus Af293]	66845476
224	*Aspergillus fumigatus Af293*	Fungus	Unassigned	allergen Asp F4 [Aspergillus fumigatus Af293]	66847146
225	*Aspergillus niger*	Fungus	Asp n 14	beta-xylosidase [Aspergillus niger]	4235093
226	*Aspergillus niger*	Fungus	Asp n 14	xylosidase [Aspergillus niger]	2181180

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227	*Aspergillus niger*	Fungus	Unassigned	serine protease	289172
228	*Aspergillus oryzae*	Fungus	Asp o 21	Alpha-amylase A type-1/2 precursor (Taka-amylase A) (TAA) (1,4-alpha-D-glucan glucanohydrolase)	94706935
229	*Aspergillus oryzae*	Fungus	Asp o 13	Oryzin precursor (Alkaline proteinase) (ALP) (Aspergillus proteinase B) (Aspergillopeptidase B)	129235
230	*Bacillus lentus*		Unassigned	RecName: Full=Subtilisin Savinase; AltName: Full=Alkaline protease	267048
231	*Bacillus licheniformis*		Unassigned	subtilisin precursor [Bacillus licheniformis]	11127680
232	*Bacillus licheniformis*		Unassigned	RecName: Full=Subtilisin Carlsberg; Flags: Precursor	135016
233	*Bacillus sp.*		Unassigned	prepro AprM [Bacillus sp.]	1225905
234	*Balanus rostratus*		Unassigned	tropomyosin [Balanus rostratus]	125659386
235	*Batillus cornutus*	Japanese turban shell	Unassigned	tropomyosin [Turbo cornutus]	219806588
236	*Batillus cornutus*	Japanese turban shell	Unassigned	[Segment 2 of 6] Tropomyosin (Major allergen Tur c 1)	47117351
237	*Batillus cornutus*	Japanese turban shell	Unassigned	[Segment 1 of 6] Tropomyosin (Major allergen Tur c 1)	47117350
238	*Bertholletia excelsa*	Brazil nut	Ber e 2	11S globulin [Bertholletia excelsa]	30313867
239	*Bertholletia excelsa*	Brazil nut	Ber e 1	2S sulfur-rich seed storage protein precursor (Allergen Ber e 1)	112754
240	*Bertholletia excelsa*	Brazil nut	Unassigned	2S albumin [Bertholletia excelsa]	17713
241	*Betula pendula*	European white birch	Unassigned	Chain A, Birch Pollen Profilin	157830684
242	*Betula pendula*	European white birch	Bet v 2	Profilin (Pollen allergen Bet v 2) (Bet v II)	130975

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
243	*Betula pendula*	European white birch	Bet v 1	Chain A, Birch Pollen Allergen Bet V 1	159162097
244	*Betula pendula*	European white birch	Bet v 1	Major pollen allergen Bet v 1-A (Allergen Bet v I-A)	114922
245	*Betula pendula*	European white birch	Bet v 1f/I	Major pollen allergen Bet v 1-F/I (Bet v I-F/I)	1168705
246	*Betula pendula*	European white birch	Bet v 1.0501	Major pollen allergen Bet v 1-E (Bet v I-E)	1168704
247	*Betula pendula*	European white birch	Bet v 1	Major pollen allergen Bet v 1-D/H (Bet v I-D/H)	1168703
248	*Betula pendula*	European white birch	Bet v 1.0301	Major pollen allergen Bet v 1-C (Bet v I-C)	1168702
249	*Betula pendula*	European white birch	Bet v 1.0201	Major pollen allergen Bet v 1-B (Bet v I-B)	1168701
250	*Betula pendula*	European white birch	Bet v 1m/n	Major pollen allergen Bet v 1-M/N (Bet v I-M/N)	1168710
251	*Betula pendula*	European white birch	Bet v 1.0901	Major pollen allergen Bet v 1-K (Bet v I-K)	1168708
252	*Betula pendula*	European white birch	Bet v 1.0801	Major pollen allergen Bet v 1-J (Bet v I-J)	1168707
253	*Betula pendula*	European white birch	Bet v 1.0701	Major pollen allergen Bet v 1-G (Bet v I-G)	1168706
254	*Betula pendula*	European white birch	Bet v 1.1001	Major pollen allergen Bet v 1-L (Bet v I-L)	1168709
255	*Betula pendula*	European white birch	Unassigned	pollen allergen Betv1, isoform at14 [Betula pendula]	4006947
256	*Betula pendula*	European white birch	Unassigned	pollen allergen Betv1, isoform at87 [Betula pendula]	4006963
257	*Betula pendula*	European white birch	Unassigned	Bet v I=major allergen [Betula verrucosa=birch trees, pollen, Peptide Partial, 43 aa]	239734

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
258	*Betula pendula*	European white birch	Bet v 1	Chain A, Birch Pollen Allergen Bet V 1 Mutant E45s	38492423
259	*Betula pendula*	European white birch	Bet v 1x	allergen Bet v 1x [Betula pendula]	30908931
260	*Betula pendula*	European white birch	Bet v 1	Chain A, Birch Pollen Allergen Bet V 1 Mutant N28t, K32q, E45s, P108g	11514622
261	*Betula pendula*	European white birch	bet v 1 b3	isoallergen bet v 1 b3 [Betula pendula]	4590396
262	*Betula pendula*	European white birch	Bet v 1 b2	isoallergen Bet v 1 b2 [Betula pendula]	4590394
263	*Betula pendula*	European white birch	Bet v 1 b1	isoallergen bet v 1 b1 [Betula pendula]	4590392
264	*Betula pendula*	European white birch	Bet v 1	pollen allergen, Betv1 [Betula pendula]	4376222
265	*Betula pendula*	European white birch	Bet v 1	pollen allergen, Betv1 [Betula pendula]	4376221
266	*Betula pendula*	European white birch	Bet v 1	pollen allergen, Betv1 [Betula pendula]	4376220
267	*Betula pendula*	European white birch	Bet v 1	pollen allergen, Betv1 [Betula pendula]	4376219
268	*Betula pendula*	European white birch	Bet v 1	pollen allergen, Betv1 [Betula pendula]	4376216
269	*Betula pendula*	European white birch	Bet v 1	pollen allergen Betv1, isoform at7 [Betula pendula]	4006967
270	*Betula pendula*	European white birch	Bet v 1	pollen allergen Betv1, isoform at5 [Betula pendula]	4006965
271	*Betula pendula*	European white birch	Bet v 1	pollen allergen Betv1, isoform at59 [Betula pendula]	4006961
272	*Betula pendula*	European white birch	Bet v 1	pollen allergen Betv1, isoform at50 [Betula pendula]	4006959

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
273	*Betula pendula*	European white birch	Bet v 1	pollen allergen Betv1, isoform at45 [Betula pendula]	4006957
274	*Betula pendula*	European white birch	Bet v 1	pollen allergen Betv1, isoform at42 [Betula pendula]	4006955
275	*Betula pendula*	European white birch	Bet v 1	pollen allergen Betv1, isoform at37 [Betula pendula]	4006953
276	*Betula pendula*	European white birch	Bet v 1	pollen allergen Betv1, isoform at10 [Betula pendula]	4006945
277	*Betula pendula*	European white birch	Bet v 1	pollen allergen Betv1, isoform at8 [Betula pendula]	4006928
278	*Betula pendula*	European white birch	Bet v 1	pollen allergen Betv1 [Betula pendula]	2564228
279	*Betula pendula*	European white birch	Bet v 1	pollen allergen Betv1 [Betula pendula]	2564224
280	*Betula pendula*	European white birch	Bet v 1	pollen allergen Betv1 [Betula pendula]	2564222
281	*Betula pendula*	European white birch	Bet v 1	pollen allergen Betv1 [Betula pendula]	2564220
282	*Betula pendula*	European white birch	Bet v 1.2301	major allergen Bet v 1 [Betula pendula]	2414158
283	*Betula pendula*	European white birch	Bet v 1.3001	pollen allergen Bet v 1 [Betula pendula]	1542873
284	*Betula pendula*	European white birch	Bet v 1.2901	pollen allergen Bet v 1 [Betula pendula]	1542871
285	*Betula pendula*	European white birch	Bet v 1.2801	pollen allergen Bet v 1 [Betula pendula]	1542869
286	*Betula pendula*	European white birch	Bet v 1.2701	pollen allergen Bet v 1 [Betula pendula]	1542867
287	*Betula pendula*	European white birch	Bet v 1.2601	pollen allergen Bet v 1 [Betula pendula]	1542865

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
288	*Betula pendula*	European white birch	Bet v 1.2501	pollen allergen Bet v 1 [Betula pendula]	1542863
289	*Betula pendula*	European white birch	Bet v 1.2401	pollen allergen Bet v 1 [Betula pendula]	1542861
290	*Betula pendula*	European white birch	Bet v 1.2201	major allergen Bet v 1 [Betula pendula]	1321728
291	*Betula pendula*	European white birch	Bet v 1.2101	major allergen Bet v 1 [Betula pendula]	1321726
292	*Betula pendula*	European white birch	Bet v 1.2001	major allergen Bet v 1 [Betula pendula]	1321724
293	*Betula pendula*	European white birch	Bet v 1.1901	major allergen Bet v 1 [Betula pendula]	1321722
294	*Betula pendula*	European white birch	Bet v 1.1502	major allergen Bet v 1 [Betula pendula]	1321720
295	*Betula pendula*	European white birch	Bet v 1.1801	major allergen Bet v 1 [Betula pendula]	1321718
296	*Betula pendula*	European white birch	Bet v 1.1701	major allergen Bet v 1 [Betula pendula]	1321716
297	*Betula pendula*	European white birch	Bet v 1.1601	major allergen Bet v 1 [Betula pendula]	1321714
298	*Betula pendula*	European white birch	Bet v 1	1-Sc1 [Betula pendula]	534910
299	*Betula pendula*	European white birch	Bet v 1	1 Sc2 [Betula pendula]	534900
300	*Betula pendula*	European white birch	Bet v 1	1 Sc-3 [Betula pendula]	534898
301	*Betula pendula*	European white birch	Bet v 1	major pollen allergen Bet v I - European white birch (fragment)	320545
302	*Betula pendula*	European white birch	Unassigned	major pollen allergen Bet v II - European white birch (fragment)	320546

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
303	*Betula pendula*	European white birch	Bet v 3	Calcium-binding allergen Bet v 3 (Bet v III)	1168696
304	*Betula pendula*	European white birch	Bet v 4	Polcalcin Bet v 4 (Calcium-binding pollen allergen Bet v 4)	14423850
305	*Betula pendula*	European white birch	Bet v 6.0102	allergenic isoflavone reductase-like protein Bet v 6.0102 [Betula pendula]	10764491
306	*Betula pendula*	European white birch	Bet v 7	peptidylprolyl isomerase (cyclophilin) [Betula pendula]	21886603
307	*Betula platyphylla*	Japanese white birch	Unassigned	Bet vI jap3 [Betula platyphylla]	12583685
308	*Betula platyphylla*	Japanese white birch	Unassigned	Bet vI jap2 [Betula platyphylla]	12583683
309	*Betula platyphylla*	Japanese white birch	Unassigned	Bet vI jap1 [Betula platyphylla]	12583681
310	*Betula sp.*	Birch	Unassigned	isoallergen {N-terminal} [birch, pollen, Peptide Partial, 51 aa]	298736
311	*Betula sp.*	Birch	Unassigned	isoallergen {N-terminal} [birch, pollen, Peptide Partial, 51 aa]	298737
312	*Blattella germanica*	German cockroach	Bla g 1.0101	major allergen Bla g 1.0101 [Blattella germanica]	4572592
313	*Blattella germanica*	German cockroach	Bla g 1.02	major allergen Bla g 1.02 [Blattella germanica]	4240395
314	*Blattella germanica*	German cockroach	Unassigned	Chain A, Crystal Structure Of Bla G 2 Complexed With Fab 4c3	315113421
315	*Blattella germanica*	German cockroach	Unassigned	Bla g 2 allergen variant [Blattella germanica]	145105726
316	*Blattella germanica*	German cockroach	Bla g 2	Aspartic protease Bla g 2 precursor (Allergen Bla g II)	1703445
317	*Blattella germanica*	German cockroach	Unassigned	Chain A, The Structure Of Mutant (N93q) Of Bla G 2	62738637

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
318	*Blattella germanica*	German cockroach	Unassigned	Bla g 4 isoallergen 2 [Blattella germanica]	194350817
319	*Blattella germanica*	German cockroach	Unassigned	Bla g 4 isoallergen 1 [Blattella germanica]	194350815
320	*Blattella germanica*	German cockroach	Unassigned	Bla g 4 allergen [Blattella germanica]	212675308
321	*Blattella germanica*	German cockroach	Unassigned	Bla g 4 allergen [Blattella germanica]	144952778
322	*Blattella germanica*	German cockroach	Bla g 4	allergen Bla g 4	1166573
323	*Blattella germanica*	German cockroach	Unassigned	Bla g 5 variant allergen [Blattella germanica]	144952780
324	*Blattella germanica*	German cockroach	Unassigned	Glutathione S-transferase (GST class-sigma) (Major allergen Bla g 5)	6225491
325	*Blattella germanica*	German cockroach	Unassigned	allergen Bla g 6.0301 [Blattella germanica]	82704036
326	*Blattella germanica*	German cockroach	Unassigned	allergen Bla g 6.0201 [Blattella germanica]	82704034
327	*Blattella germanica*	German cockroach	Unassigned	allergen Bla g 6.0101 [Blattella germanica]	82704032
328	*Blattella germanica*	German cockroach	Unassigned	delta class glutathione S-transferase [Blattella germanica]	161137518
329	*Blattella germanica*	German cockroach	Unassigned	tropomyosin [Blattella germanica]	8101069
330	*Blattella germanica*	German cockroach	Unassigned	36 kda allergen {peptide 143-115} [Blattella germanica=German cockroaches, Peptide Partial, 25 aa]	544619
331	*Blattella germanica*	German cockroach	Unassigned	36 kda allergen {peptide 143-111} [Blattella germanica=German cockroaches, Peptide Partial, 20 aa]	544618

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
332	*Blomia tropicalis*	Mite	Blo t 1	cysteine protease precursor [Blomia tropicalis]	14276828
333	*Blomia tropicalis*	Mite	Unassigned	Blo t 1.02 [Blomia tropicalis] Manual Entry	2
334	*Blomia tropicalis*	Mite	Unassigned	Blo t 1 allergen [Blomia tropicalis]	33667928
335	*Blomia tropicalis*	Mite	Unassigned	group 10 allergen Blo t 10 [Blomia tropicalis]	156938889
336	*Blomia tropicalis*	Mite	Blo t 11	paramyosin allergen [Blomia tropicalis]	21954740
337	*Blomia tropicalis*	Mite	Unassigned	Fatty acid-binding protein (Allergen Blo t 13) (Bt6)	14423698
338	*Blomia tropicalis*	Mite	Unassigned	Blo t 13 allergen [Blomia tropicalis]	37958153
339	*Blomia tropicalis*	Mite	Unassigned	Blo t 21 allergen [Blomia tropicalis]	111494253
340	*Blomia tropicalis*	Mite	Unassigned	Blo t 21 allergen [Blomia tropicalis]	111120432
341	*Blomia tropicalis*	Mite	Unassigned	Blo t 21 allergen [Blomia tropicalis]	111120428
342	*Blomia tropicalis*	Mite	Unassigned	Blo t 21 allergen [Blomia tropicalis]	111120424
343	*Blomia tropicalis*	Mite	Unassigned	Blo t 21 allergen [Blomia tropicalis]	111120420
344	*Blomia tropicalis*	Mite	Unassigned	Blo t 3 allergen [Blomia tropicalis]	33667930
345	*Blomia tropicalis*	Mite	Unassigned	trypsin [Blomia tropicalis]	25989482
346	*Blomia tropicalis*	Mite	Unassigned	Chain A, Nmr Solution Structure Of Blo T 5, A Major Mite Allergen From Blomia Tropicalis	160285626
347	*Blomia tropicalis*	Mite	Unassigned	Blo t 5 allergen [Blomia tropicalis]	111120450
348	*Blomia tropicalis*	Mite	Unassigned	Blo t 5 allergen [Blomia tropicalis]	111120436
349	*Blomia tropicalis*	Mite	Blo t 5	major IgE-binding protein Blo t 5 [Blomia tropicalis]	4204917
350	*Bombus pennsylvanicus*	Bumblebee	Unassigned	RecName: Full=Phospholipase A2; AltName: Full=Phosphatidylcholine 2-acylhydrolase; AltName: Allergen=Bom p 1	47117013

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
351	*Bombus pennsylvanicus*	Bumblebee	Unassigned	RecName: Full=Venom protease; AltName: Allergen=Bom p 4	75009997
352	*Bombus terrestris*	Bumblebee	Unassigned	Phospholipase A2 (Phosphatidylcholine 2-acylhydrolase) (Allergen Bom t 1)	14423832
353	*Bombus terrestris*	Bumblebee	Unassigned	RecName: Full=Venom protease; AltName: Allergen=Bom t 4	313471465
354	*Bombyx mori*	Silkworm	Unassigned	arginine kinase [Bombyx mori]	204324083
355	*Bos taurus*	Bovine	Unassigned	alpha S1 casein [Bos taurus]	159793217
356	*Bos taurus*	Bovine	Unassigned	alpha S1 casein [Bos taurus]	159793201
357	*Bos taurus*	Bovine	Unassigned	alpha S1 casein [Bos taurus]	159793197
358	*Bos taurus*	Bovine	Unassigned	alpha-s1-casein	162927
359	*Bos taurus*	Bovine	Unassigned	alpha-S1-casein	162794
360	*Bos taurus*	Bovine	Unassigned	alpha-s1-casein precursor	162792
361	*Bos taurus*	Bovine	Unassigned	alpha-s1-casein	162650
362	*Bos taurus*	Bovine	Unassigned	alpha-s2-like casein precursor	162929
363	*Bos taurus*	Bovine	Unassigned	beta-casein A3 [Bos taurus]	459292
364	*Bos taurus*	Bovine	Unassigned	beta-casein precursor	162931
365	*Bos taurus*	Bovine	Unassigned	beta-casein	162805
366	*Bos taurus*	Bovine	Unassigned	beta-casein precursor	162797
367	*Bos taurus*	Bovine	Unassigned	Allergen Bos d 2 precursor (Dander major allergen BDA20) (Dermal allergen BDA20)	2497701
368	*Bos taurus*	Bovine	Bos d 3	S100 calcium-binding protein A7 (Allergen Bos d 3) (Dander minor allergen BDA11) (Dermal allergen BDA11) (Calcium-binding protein in amniotic fluid 2) (CAAF2)	2493414

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
369	*Bos taurus*	Bovine	Unassigned	Alpha-lactalbumin precursor (Lactose synthase B protein) (Allergen Bos d 4)	125996
370	*Bos taurus*	Bovine	Bos d 4	alpha-lactalbumin [Bos taurus]	295774
371	*Bos taurus*	Bovine	Unassigned	major allergen beta-lactoglobulin [Bos taurus]	195957138
372	*Bos taurus*	Bovine	Unassigned	Beta-lactoglobulin precursor (Beta-LG) (Allergen Bos d 5)	125910
373	*Bos taurus*	Bovine	Unassigned	beta-lactoglobulin	162750
374	*Bos taurus*	Bovine	Bos d 5	beta-lactoglobulin [Bos taurus]	520
375	*Bos taurus*	Bovine	Unassigned	RecName: Full=Serum albumin; AltName: Full=BSA; AltName: Allergen=Bos d 6; Flags: Precursor	1351907
376	*Bos taurus*	Bovine	Unassigned	bovine serum albumin [Bos taurus]	3336842
377	*Bos taurus*	Bovine	Unassigned	collagen alpha-2(I) chain precursor [Bos taurus]	27806257
378	*Bos taurus*	Bovine	Unassigned	kappa-casein precursor	162811
379	*Bos taurus*	Bovine	Unassigned	lactotransferrin [Bos taurus]	30794292
380	*Brassica juncea*	Mustard	Bra j 1	Allergen Bra j 1-E (Bra j I) [Contains: Allergen Bra j 1-E small chain; Allergen Bra j 1-E large chain]	32363444
381	*Brassica napus*	Rape	Bra n 1	Napin-3 (Napin BnIII) (Napin nIII) (1.7S seed storage protein) [Contains: Napin-3 small chain; Napin-3 large chain]	75107016
382	*Brassica napus*	Rape	Unassigned	Polcalcin Bra n 1 (Calcium-binding pollen allergen Bra n 1)	59800143
383	*Brassica napus*	Rape	Unassigned	recombinant Ib pronapin precursor [Brassica napus]	26985163
384	*Brassica napus*	Rape	Unassigned	Polcalcin Bra n 2 (Calcium-binding pollen allergen Bra n 2)	59800145

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
385	*Brassica napus*	Rape	Unassigned	pollen allergen group II (clone 44) - rape	2129802
386	*Brassica napus*	Rape	Unassigned	pollen allergen group II (clone 42) - rape	2129801
387	*Brassica oleracea*	Cabbage	Unassigned	LTP Bra o 3 [Brassica oleracea] Manual Entry	1
388	*Brassica rapa*	Turnip	Unassigned	pollen allergen group II (clone 4) - turnip (fragment)	2129805
389	*Brassica rapa subsp. rapa*	Turnip	Unassigned	Chitin-binding allergen Bra r 2	32363456
390	*Brassica rapa subsp. rapa*	Turnip	Unassigned	Polcalcin Bra r 1 (Calcium-binding pollen allergen Bra r 1)	59800144
391	*Brassica rapa subsp. rapa*	Turnip	Unassigned	Polcalcin Bra r 2 (Calcium-binding pollen allergen Bra r 2)	59800146
392	*Candida albicans*	Yeast	Cand a 3	29 kDa IgE-binging protein [Candida albicans]	37548637
393	*Candida albicans*	Yeast	Unassigned	Enolase 1 (2-phosphoglycerate dehydratase) (2-phospho-D-glycerate hydro-lyase)	232054
394	*Canis familiaris*	Dog	Can f 1	Major allergen Can f 1 precursor (Allergen Dog 1)	3121745
395	*Canis familiaris*	Dog	Can f 2	precursor Can f II [Canis familiaris]	29292274
396	*Canis familiaris*	Dog	Can f 2	precursor Can f II [Canis familiaris]	29292272
397	*Canis familiaris*	Dog	Can f 2	Minor allergen Can f 2 precursor (Allergen Dog 2)	3121746
398	*Canis familiaris*	Dog	Can f 3	albumin [Canis familiaris]	6687188
399	*Canis familiaris*	Dog	Can f 3	albumin [Canis familiaris]	3319897
400	*Canis familiaris*	Dog	Can f 3	albumin [Canis familiaris]	633938
401	*Canis familiaris*	Dog	Unassigned	allergen Can f 4 precursor [Canis lupus familiaris]	262232390

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
402	*Capsicum annuum*	Bell pepper	Cap a 2	profilin [Capsicum annuum]	16555785
403	*Carica papaya*	Papaya	Unassigned	Papain precursor (Papaya proteinase I) (PPI) (Allergen Car p 1)	129614
404	*Carpinus betulus*	Hornbeam	Unassigned	group 2 Car b 1=isoallergenic variant [Carpinus betulus=hornbeams, pollen, Peptide Recombinant Partial, 80 aa]	1008580
405	*Carpinus betulus*	Hornbeam	Unassigned	group 1 Car b 1=isoallergenic variant [Carpinus betulus=hornbeams, pollen, Peptide Recombinant Partial, 80 aa]	1008579
406	*Carpinus betulus*	Hornbeam	Unassigned	group 1 Car b 1=isoallergenic variant [Carpinus betulus=hornbeams, pollen, Peptide Recombinant Partial, 80 aa]	1008578
407	*Carpinus betulus*	Hornbeam	Unassigned	pollen allergen Car b 1 isoform [Carpinus betulus]	167472839
408	*Carpinus betulus*	Hornbeam	Unassigned	pollen allergen Car b 1 isoform [Carpinus betulus]	167472841
409	*Carpinus betulus*	Hornbeam	Unassigned	pollen allergen Car b 1 isoform [Carpinus betulus]	167472843
410	*Carpinus betulus*	Hornbeam	Unassigned	pollen allergen Car b 1 isoform [Carpinus betulus]	167472837
411	*Carpinus betulus*	Hornbeam	Unassigned	pollen allergen Car b 1 isoform [Carpinus betulus]	167472845
412	*Carpinus betulus*	Hornbeam	Unassigned	Car b I=major allergen [Carpinus betulus=hornbeam trees, pollen, Peptide Partial, 40 aa]	239735
413	*Carpinus betulus*	Hornbeam	Car b 1.0302	pollen allergen Car b 1 [Carpinus betulus]	1545897
414	*Carpinus betulus*	Hornbeam	Car b 1.0301	pollen allergen Car b 1 [Carpinus betulus]	1545895
415	*Carpinus betulus*	Hornbeam	Car b 1.0108	pollen allergen Car b 1 [Carpinus betulus]	1545893

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
416	*Carpinus betulus*	Hornbeam	Car b 1	pollen allergen Car b 1 [Carpinus betulus]	1545891
417	*Carpinus betulus*	Hornbeam	Car b 1.0105	pollen allergen Car b 1 [Carpinus betulus]	1545887
418	*Carpinus betulus*	Hornbeam	Car b 1.0104	pollen allergen Car b 1 [Carpinus betulus]	1545879
419	*Carpinus betulus*	Hornbeam	Car b 1.0104	pollen allergen Car b 1 [Carpinus betulus]	1545877
420	*Carpinus betulus*	Hornbeam	Car b 1.0103	pollen allergen Car b 1 [Carpinus betulus]	1545875
421	*Carpinus betulus*	Hornbeam	Car b 1	Major pollen allergen Car b 1 isoform 2 (Car b I)	730049
422	*Carpinus betulus*	Hornbeam	Car b 1	Major pollen allergen Car b 1 isoforms 1A and 1B (Car B I)	730048
423	*Carpinus betulus*	Hornbeam	Car b 1	Car b I [Carpinus betulus]	402745
424	*Castanea sativa*	European chestnut	Unassigned	Cas s 1 pollen allergen [Castanea sativa]	212291468
425	*Castanea sativa*	European chestnut	Unassigned	Cas s 1 pollen allergen [Castanea sativa]	212291464
426	*Castanea sativa*	European chestnut	Unassigned	Cas s 1 pollen allergen [Castanea sativa]	212291466
427	*Castanea sativa*	European chestnut	Cas s 1	ypr10 [Castanea sativa]	16555781
428	*Castanea sativa*	European chestnut	Unassigned	class I chitinase isoform 2 [Castanea sativa]	307159110
429	*Castanea sativa*	European chestnut	Cas s 5	chitinase Ib [Castanea sativa]	1359600
430	*Cavia porcellus*	Domestic guinea pig	Cav p 1	Major urinary protein (MUP) (Allergen Cav p 1)	32469617

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
431	*Cavia porcellus*	Domestic guinea pig	Unassigned	allergen lipocalin Cav p 2.0101 precursor [Cavia porcellus]	325910590
432	*Cavia porcellus*	Domestic guinea pig	Unassigned	allergen lipocalin Cav p 3.0101 precursor [Cavia porcellus]	325910592
433	*Chamaecyparis obtusa*	Japanese cypress	Unassigned	Major pollen allergen Cha o 1 precursor	9087163
434	*Chamaecyparis obtusa*	Japanese cypress	Unassigned	pollen allergen [Chamaecyparis obtusa]	114841683
435	*Chamaecyparis obtusa*	Japanese cypress	Unassigned	Polygalacturonase precursor (PG) (Pectinase) (Major pollen allergen Cha o 2)	47606004
436	*Charybdis feriatus*	Crab	Cha f 1	Tropomyosin (Allergen Cha f 1) (Cha f I)	14285800
437	*Chenopodium album*	Pigweed	Unassigned	Pollen allergen Che a 1 precursor	47605504
438	*Chenopodium album*	Pigweed	Unassigned	Che a 2 pollen allergen [Chenopodium album]	238886048
439	*Chenopodium album*	Pigweed	Che a 2	pollen allergen Che a 2 [Chenopodium album]	29465666
440	*Chenopodium album*	Pigweed	Che a 3	pollen allergen Che a 3 [Chenopodium album]	29465668
441	*Chionoecetes opilio*	Snow Crab	Unassigned	RecName: Full=Tropomyosin; AltName: Full=Tropomyosin, slow-tonic isoform; Short=Tm-Chio-tonic	308191588
442	*Chironomus kiiensis*	Midge	Unassigned	Tropomyosin (Allergen Chi k 10)	42559556
443	*Chironomus thummi thummi*	Midge	Chi t 1.02	Globin CTT-IV precursor	121227
444	*Chironomus thummi thummi*	Midge	Chi t 1.01	Globin CTT-III precursor (Erythrocruorin III)	121219
445	*Chironomus thummi thummi*	Midge	Chi t 2	Globin CTT-I/CTT-IA precursor (Erythrocruorin)	2506460

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
446	*Chironomus thummi thummi*	Midge	Chi t 3	Globin CTT-II beta precursor	1707908
447	*Chironomus thummi thummi*	Midge	Chi t 4	Globin CTT-IIIA	121256
448	*Chironomus thummi thummi*	Midge	Chi t 5	Globin CTT-VI precursor	2506461
449	*Chironomus thummi thummi*	Midge	Chi t 7	Globin CTT-VIIB-5/CTT-VIIB-9 precursor	56405054
450	*Chironomus thummi thummi*	Midge	Chi t 7	Globin CTT-VIIB-4 precursor (Erythrocruorin)	56405052
451	*Chironomus thummi thummi*	Midge	Chi t 7	Globin CTT-VIIB-7 precursor	121249
452	*Chironomus thummi thummi*	Midge	Chi t 7	Globin CTT-VIIB-6 precursor	121248
453	*Chironomus thummi thummi*	Midge	Chi t 7	Globin CTT-VIIB-3 precursor	121244
454	*Chironomus thummi thummi*	Midge	Chi t 8	Globin CTT-VIII	121237
455	*Chironomus thummi thummi*	Midge	Chi t 9	Globin CTT-X	121259
456	*Citrus limon*	Lemon	Unassigned	Nonspecific lipid-transfer protein (LTP) (Allergen Cit l 3)	52783176
457	*Citrus sinensis*	Navel orange	Unassigned	Germin-like protein (Allergen Cit s 1)	52782810
458	*Citrus sinensis*	Navel orange	Unassigned	RecName: Full=Profilin; AltName: Allergen=Cit s 2	261260074
459	*Citrus sinensis*	Navel orange	Cit s 3	lipid transfer protein [Citrus sinensis]	50199132
460	*Citrus sinensis*	Navel orange	Unassigned	Nonspecific lipid-transfer protein (LTP) (Allergen Cit s 3.0101)	52783177
461	*Cladosporium cladosporioides*		Unassigned	vacuolar serine protease [Cladosporium cladosporioides]	148361511

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
462	*Cochliobolus lunatus*		Unassigned	Cytochrome c	20137645
463	*Cochliobolus lunatus*		Cur l 2.01	enolase [Curvularia lunata]	14585753
464	*Coprinus comatus*	Shaggy mane	Cop c 1	Cop c1 allergen [Coprinus comatus]	4538529
465	*Corylus avellana*	European hazelnut	Cor a I	Major pollen allergen Cor a 1 isoforms 5, 6, 11 and 16 (Cor a I)	584968
466	*Corylus avellana*	European hazelnut	Cor a 1.0404	major allergen variant Cor a 1.0404 [Corylus avellana]	11762106
467	*Corylus avellana*	European hazelnut	Cor a 1.0403	major allergen variant Cor a 1.0403 [Corylus avellana]	11762104
468	*Corylus avellana*	European hazelnut	Cor a 1.0402	major allergen variant Cor a 1.0402 [Corylus avellana]	11762102
469	*Corylus avellana*	European hazelnut	Cor a 1.0401	major allergen Cor a 1.0401 [Corylus avellana]	5726304
470	*Corylus avellana*	European hazelnut	Cor a 1.0301	major allergen Cor a 1 [Corylus avellana]	1321733
471	*Corylus avellana*	European hazelnut	Cor a 1.0201	major allergen Cor a 1 [Corylus avellana]	1321731
472	*Corylus avellana*	European hazelnut	Cor a 1.0102	major allergen [Corylus avellana]	22690
473	*Corylus avellana*	European hazelnut	Cor a 1.0104	major allergen [Corylus avellana]	22686
474	*Corylus avellana*	European hazelnut	Cor a 1.0103	major allergen [Corylus avellana]	22684
475	*Corylus avellana*	European hazelnut	Cor a 10	putative luminal binding protein [Corylus avellana]	10944737
476	*Corylus avellana*	European hazelnut	Cor a 11	48-kDa glycoprotein precursor [Corylus avellana]	19338630
477	*Corylus avellana*	European hazelnut	Unassigned	2S albumin [Corylus avellana]	226437844

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
478	*Corylus avellana*	European hazelnut	Cor a 2	minor allergen hazelnut profilin [Corylus avellana]	12659208
479	*Corylus avellana*	European hazelnut	Cor a 2	minor allergen hazelnut profilin [Corylus avellana]	12659206
480	*Corylus avellana*	European hazelnut	Cor a 8	lipid transfer protein precursor [Corylus avellana]	13507262
481	*Corylus avellana*	European hazelnut	Cor a 9	11S globulin-like protein [Corylus avellana]	18479082
482	*Corylus avellana*	European hazelnut	Unassigned	oleosin [Corylus avellana]	29170509
483	*Crangon crangon*		Unassigned	tropomyosin [Crangon crangon]	238477263
484	*Crangon crangon*		Unassigned	arginine kinase [Crangon crangon]	238477265
485	*Crangon crangon*		Unassigned	sarcoplasmic calcium-binding protein [Crangon crangon]	238477327
486	*Crangon crangon*		Unassigned	myosin light chain [Crangon crangon]	238477331
487	*Crangon crangon*		Unassigned	troponin C [Crangon crangon]	238477333
488	*Crangon crangon*		Unassigned	triosephosphate isomerase [Crangon crangon]	238477329
489	*Crassostrea gigas*	American oyster	Unassigned	tropomyosin [Crassostrea gigas]	219806594
490	*Crassostrea gigas*	American oyster	Unassigned	tropomyosin [Crassostrea gigas]	15419048
491	*Crassostrea virginica*	Eastern oyster	Unassigned	tropomyosin [Crassostrea virginica]	3668408
492	*Crocus sativus*	Saffron crocus	Unassigned	profilin [Crocus sativus]	58700651
493	*Cryptomeria japonica*	Japanese cedar	Unassigned	class IV chitinase [Cryptomeria japonica]	56550550
494	*Cryptomeria japonica*	Japanese cedar	Unassigned	Cry j IB precursor [Cryptomeria japonica]	493634
495	*Cryptomeria japonica*	Japanese cedar	Cry j 1	Sugi basic protein precursor (SBP) (Major allergen Cry j 1) (Cry j I)	1173367

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
496	*Cryptomeria japonica*	Japanese cedar	Cry j 1	Cry j 1 precursor [Cryptomeria japonica]	19570315
497	*Cryptomeria japonica*	Japanese cedar	Unassigned	allergen Cry j 2 [Cryptomeria japonica]	123299282
498	*Cryptomeria japonica*	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841671
499	*Cryptomeria japonica*	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841665
500	*Cryptomeria japonica*	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841663
501	*Cryptomeria japonica*	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841657
502	*Cryptomeria japonica*	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841653
503	*Cryptomeria japonica*	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841641
504	*Cryptomeria japonica*	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841635
505	*Cryptomeria japonica*	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841629
506	*Cryptomeria japonica*	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841617
507	*Cryptomeria japonica*	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841607
508	*Cryptomeria japonica*	Japanese cedar	Cry j 2	allergen Cry j 2 [Cryptomeria japonica]	24898908
509	*Cryptomeria japonica*	Japanese cedar	Cry j 2	allergen Cry j 2 [Cryptomeria japonica]	24898906
510	*Cryptomeria japonica*	Japanese cedar	Cry j 2	allergen Cry j 2 [Cryptomeria japonica]	24898904
511	*Cryptomeria japonica*	Japanese cedar	Cry j 2	Polygalacturonase precursor (PG) (Pectinase) (Major pollen allergen Cry j 2) (Cry j II)	1171004
512	*Cryptomeria japonica*	Japanese cedar	Unassigned	isoflavone reductase-like protein CJP-6 [Cryptomeria japonica]	19847822
513	*Cryptomeria japonica*	Japanese cedar	Unassigned	pollen allergen CJP-8 [Cryptomeria japonica]	291621332
514	*Cryptomeria japonica*	Japanese cedar	Unassigned	pollen allergen CPA63 [Cryptomeria japonica]	293329689
515	*Cryptomeria japonica*	Japanese cedar	Unassigned	thaumatin-like protein [Cryptomeria japonica]	139002766

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
516	*Cucumis melo*	Muskmelon	Unassigned	Cucumisin precursor (Allergen Cuc m 1)	71153243
517	*Cucumis melo*	Muskmelon	Cuc m 2	profilin [Cucumis melo]	58263793
518	*Cucumis melo*	Muskmelon	Cuc m 2	profilin [Cucumis melo]	31559374
519	*Cucumis melo*	Muskmelon	Cuc m 3	[Segment 3 of 3] Pathogenesis-related protein (PR-1) (Allergen Cuc m 3)	46396598
520	*Cucumis melo*	Muskmelon	Cuc m 3	[Segment 2 of 3] Pathogenesis-related protein (PR-1) (Allergen Cuc m 3)	46396597
521	*Cucumis melo*	Muskmelon	Cuc m 3	[Segment 1 of 3] Pathogenesis-related protein (PR-1) (Allergen Cuc m 3)	46396596
522	*Cucumis melo var. inodorus*	Muskmelon	Unassigned	pathogen-related protein 1 [Cucumis melo var. inodorus]	171464770
523	*Cucumis melo var. reticulatus*	Netted muskmelon	Cuc m 2	profilin [Cucumis melo var. reticulatus]	57021110
524	*Cupressus arizonica*	Arizona Cypress	Unassigned	Major pollen allergen Cup a 1	9087167
525	*Cupressus arizonica*	Arizona Cypress	Unassigned	major allergen Cup a 1 [Cupressus arizonica]	118197955
526	*Cupressus arizonica*	Arizona Cypress	Cup a 1	putative allergen Cup a 1 [Cupressus arizonica]	19069497
527	*Cupressus arizonica*	Arizona Cypress	Unassigned	Cup a 3 protein [Cupressus arizonica]	9929163
528	*Cupressus arizonica*	Arizona Cypress	Unassigned	putative Cup a 4 allergen [Hesperocyparis arizonica]	261865475
529	*Cupressus sempervirens*	Mediterranean Cypress	Cup s 1.0105	Cup s 1 pollen allergen precursor [Cupressus sempervirens]	8101719
530	*Cupressus sempervirens*	Mediterranean Cypress	Cup s 1.0104	Cup s 1 pollen allergen precursor [Cupressus sempervirens]	8101717
531	*Cupressus sempervirens*	Mediterranean Cypress	Cup s 1.0103	Cup s 1 pollen allergen precursor [Cupressus sempervirens]	8101715
532	*Cupressus sempervirens*	Mediterranean Cypress	Cup s 1.0102	Cup s 1 pollen allergen precursor [Cupressus sempervirens]	8101713

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
533	*Cupressus sempervirens*	Mediterranean Cypress	Cup s 1.0101	Cup s 1 pollen allergen precursor [Cupressus sempervirens]	8101711
534	*Cupressus sempervirens*	Mediterranean Cypress	Unassigned	PR5 allergen Cup s 3.2 precursor [Cupressus sempervirens]	38456228
535	*Cupressus sempervirens*	Mediterranean Cypress	Unassigned	PR5 allergen Cup s 3.3 precursor [Cupressus sempervirens]	38456230
536	*Cynodon dactylon*	Bermuda grass	Cyn d 1.0203	acidic Cyn d 1 isoallergen isoform 4 precursor [Cynodon dactylon]	16076697
537	*Cynodon dactylon*	Bermuda grass	Cyn d 1	acidic Cyn d 1 isoallergen isoform 3 precursor [Cynodon dactylon]	16076695
538	*Cynodon dactylon*	Bermuda grass	Cyn d 1.0202	acidic Cyn d 1 isoallergen isoform 2 precursor [Cynodon dactylon]	16076693
539	*Cynodon dactylon*	Bermuda grass	Cyn d 1.0201	acidic allergen Cyn d 1 precursor [Cynodon dactylon]	15384338
540	*Cynodon dactylon*	Bermuda grass	Cyn d 1	Major pollen allergen Cyn d 1	14423757
541	*Cynodon dactylon*	Bermuda grass	Cyn d 1.0204	acidic Cyn d 1 isoallergen isoform 1 precursor [Cynodon dactylon]	10314021
542	*Cynodon dactylon*	Bermuda grass	Cyn d 1	Cyn d Ib isoallergen {N-terminal} [Cynodon dactylon=Bermuda grass, pollen, Peptide Partial, 34 aa]	691726
543	*Cynodon dactylon*	Bermuda grass	Cyn d 1	major allergen Cyn d I=29 kda polypeptide {N-terminal} [Cynodon dactylon=Bermuda grass, pollen, Peptide Partial, 38 aa]	451275
544	*Cynodon dactylon*	Bermuda grass	Cyn d 1	major allergen Cyn d I=34 kda polypeptide {N-terminal} [Cynodon dactylon=Bermuda grass, pollen, Peptide Partial, 25 aa]	451274
545	*Cynodon dactylon*	Bermuda grass	Cyn d 12	profilin 1 [Cynodon dactylon]	2154730

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
546	*Cynodon dactylon*	Bermuda grass	Cyn d 7	calcium-binding pollen allergen [Cynodon dactylon]	1871507
547	*Cynodon dactylon*	Bermuda grass	Unassigned	B4 protein allergen [Cynodon dactylon]	1247375
548	*Cynodon dactylon*	Bermuda grass	Unassigned	B1 protein allergen [Cynodon dactylon]	1247373
549	*Cyprinus carpio*	Carp	Unassigned	parvalbumin [Cyprinus carpio]	17977827
550	*Cyprinus carpio*	Carp	Unassigned	parvalbumin [Cyprinus carpio]	17977825
551	*Dactylis glomerata*	Orchard grass	Unassigned	group 1 allergen Dac g 1.01 precursor [Dactylis glomerata]	33149333
552	*Dactylis glomerata*	Orchard grass	Dac g 1	unnamed protein product [Dactylis glomerata]	18093991
553	*Dactylis glomerata*	Orchard grass	Dac g 2	pollen allergen (group II) [Dactylis glomerata]	4007040
554	*Dactylis glomerata*	Orchard grass	Dac g 2	allergen Dac g II	1093120
555	*Dactylis glomerata*	Orchard grass	Unassigned	Pollen allergen Dac g 3 (Dac g III)	14423759
556	*Dactylis glomerata*	Orchard grass	Unassigned	[Segment 4 of 4] Major pollen allergen Dac g 4	32363467
557	*Dactylis glomerata*	Orchard grass	Unassigned	[Segment 3 of 4] Major pollen allergen Dac g 4	32363466
558	*Dactylis glomerata*	Orchard grass	Unassigned	[Segment 2 of 4] Major pollen allergen Dac g 4	32363465
559	*Dactylis glomerata*	Orchard grass	Unassigned	[Segment 1 of 4] Major pollen allergen Dac g 4	32363464
560	*Dactylis glomerata*	Orchard grass	Dac g 5	unnamed protein product [Dactylis glomerata]	18093971
561	*Dactylis glomerata*	Orchard grass	Dac g 5	group 5 allergen precursor [Dactylis glomerata]	14423124
562	*Daucus carota*	Carrot	Unassigned	PRP-like protein [Daucus carota]	302379159

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563	*Daucus carota*	Carrot	Unassigned	PRP-like protein [Daucus carota]	302379157
564	*Daucus carota*	Carrot	Unassigned	PRP-like protein [Daucus carota]	302379155
565	*Daucus carota*	Carrot	Unassigned	PRP-like protein [Daucus carota]	302379153
566	*Daucus carota*	Carrot	Unassigned	PRP-like protein [Daucus carota]	302379151
567	*Daucus carota*	Carrot	Unassigned	PRP-like protein [Daucus carota]	302379149
568	*Daucus carota*	Carrot	Dau c 1.0301	PRP-like protein [Daucus carota]	302379147
569	*Daucus carota*	Carrot	Dau c 1.0105	Major allergen Dau c 1 (CR16) (Pathogenesis-related protein Gea20)	8928058
570	*Daucus carota*	Carrot	Unassigned	pathogenesis-related protein-like protein 1 [Daucus carota]	19912791
571	*Daucus carota*	Carrot	Dau c 1.0201	major allergen isoform Dau c 1.0201 [Daucus carota]	18652047
572	*Daucus carota*	Carrot	Dau c 1.0104	major allergen [Daucus carota]	2154734
573	*Daucus carota*	Carrot	Dau c 1.0103	major allergen [Daucus carota]	2154732
574	*Daucus carota*	Carrot	Dau c 1.0102	cr16 [Daucus carota]	1663522
575	*Daucus carota*	Carrot	Dau c 1.0101	pathogenesis-related protein	1335877
576	*Daucus carota*	Carrot	Unassigned	RecName: Full=Profilin; AltName: Full=Minor pollen allergen Dau c 4; AltName: Allergen=Dau c 4	47606043
577	*Davidiella tassiana*	Fungus	Unassigned	Aldehyde dehydrogenase (ALDDH) (Allergen Cla h 10) (Cla h 3) (Cla h III)	108935817
578	*Davidiella tassiana*	Fungus	Cla h 5	60S acidic ribosomal protein P2 (Minor allergen Cla h 4) (Cla h IV)	21542440
579	*Davidiella tassiana*	Fungus	Cla h 5	60S acidic ribosomal protein P2 (Allergen Cla h 3) (Cla h III)	1173074

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
580	*Davidiella tassiana*	Fungus	Cla h 6	Enolase (2-phosphoglycerate dehydratase) (2-phospho-D-glycerate hydro-lyase) (Allergen Cla h 6) (Cla h VI)	6015094
581	*Davidiella tassiana*	Fungus	Cla h 6	enolase; phosphopyruvate hydratase [Davidiella tassiana]	467660
582	*Davidiella tassiana*	Fungus	Cla h 7	Minor allergen Cla h 5 (Cla h V)	1168970
583	*Davidiella tassiana*	Fungus	Unassigned	Probable NADP-dependent mannitol dehydrogenase (MtDH) (Mannitol 2-dehydrogenase [NADP+]) (Allergen Cla h 8)	85701146
584	*Davidiella tassiana*	Fungus	Unassigned	vacuolar serine protease [Davidiella tassiana]	60116876
585	*Davidiella tassiana*	Fungus	Unassigned	Heat shock 70 kDa protein (Allergen Cla h 4) (Cla h IV)	729764
586	*Davidiella tassiana*	Fungus	Unassigned	hydrophobin [Davidiella tassiana]	22796153
587	*Davidiella tassiana*	Fungus	Unassigned	putative nuclear transport factor 2 [Davidiella tassiana]	21748151
588	*Dermatophagoides farinae*	House dust mite	Unassigned	Chain A, Solution Structure Of Der F 13, Group 13 Allergen From House Dust Mites	99031759
589	*Dermatophagoides farinae*	House dust mite	Der f 16	gelsolin-like allergen Der f 16 [Dermatophagoides farinae]	21591547
590	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 1 allergen [Dermatophagoides farinae]	37958161
591	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 1 allergen [Dermatophagoides farinae]	156106765
592	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 1 allergen precursor [Dermatophagoides farinae]	76097507

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593	*Dermatophagoides farinae*	House dust mite	Der f 1	Der f 1 allergen preproenzyme [Dermatophagoides farinae]	27530349
594	*Dermatophagoides farinae*	House dust mite	Der f 1	Major mite fecal allergen Der f 1 precursor (Der f I)	730035
595	*Dermatophagoides farinae*	House dust mite	Unassigned	Tropomyosin (Allergen Der f 10) (Mag44)	42559584
596	*Dermatophagoides farinae*	House dust mite	Unassigned	Paramyosin (Allergen Der f 11) (Antigen Df642)	42559514
597	*Dermatophagoides farinae*	House dust mite	Der f 14	Mag3 [Dermatophagoides farinae]	1545803
598	*Dermatophagoides farinae*	House dust mite	Unassigned	Allergen Mag	729979
599	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 2 allergen [Dermatophagoides farinae]	37958157
600	*Dermatophagoides farinae*	House dust mite	Unassigned	group 2 allergen [Dermatophagoides farinae]	256631558
601	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 2 allergen [Dermatophagoides farinae]	218203834
602	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 2 allergen [Dermatophagoides farinae]	156480837
603	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 2 allergen precursor [Dermatophagoides farinae]	76097511
604	*Dermatophagoides farinae*	House dust mite	Unassigned	mite allergen Der f 2 [Dermatophagoides farinae]	55859466
605	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 2 [Dermatophagoides farinae]	55859468
606	*Dermatophagoides farinae*	House dust mite	Unassigned	mite allergen Der f 2 [Dermatophagoides farinae]	55859470
607	*Dermatophagoides farinae*	House dust mite	Der f 2	major Der f 2 isoform [Dermatophagoides farinae]	17978844

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608	*Dermatophagoides farinae*	House dust mite	Der f 2	Der f II [Dermatophagoides farinae]	546852
609	*Dermatophagoides farinae*	House dust mite	Der f 2	mite allergen Der f II precursor [Dermatophagoides farinae]	217308
610	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 3 allergen [Dermatophagoides farinae]	218203818
611	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 3 allergen [Dermatophagoides farinae]	218203816
612	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 3 allergen precursor [Dermatophagoides farinae]	163638970
613	*Dermatophagoides farinae*	House dust mite	Der f 3	Mite allergen Der f 3 precursor (Der f III)	2507248
614	*Dermatophagoides farinae*	House dust mite	Der f 3	Der f 3 mite allergen	1314736
615	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 6 allergen [Dermatophagoides farinae]	218203828
616	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 6 allergen [Dermatophagoides farinae]	218203826
617	*Dermatophagoides farinae*	House dust mite	Unassigned	DF5=allergen {N-terminal} [Dermatophagoides farinae=mites, Peptide Partial, 20 aa]	404371
618	*Dermatophagoides farinae*	House dust mite	Unassigned	Mite allergen Der f 6 precursor (Der f VI) (DF5)	14424450
619	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 7 allergen [Dermatophagoides farinae]	218203832
620	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 7 allergen [Dermatophagoides farinae]	37958165
621	*Dermatophagoides farinae*	House dust mite	Der f 7	Mite allergen Der f 7 precursor (Der f VII)	2498299
622	*Dermatophagoides farinae*	House dust mite	Der f 18	60 kDa allergen Der f 18p [Dermatophagoides farinae]	27550039

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623	*Dermatophagoides farinae*	House dust mite	Unassigned	group 21 allergen [Dermatophagoides farinae]	140089326
624	*Dermatophagoides farinae*	House dust mite	Unassigned	group 21 allergen [Dermatophagoides farinae]	140089324
625	*Dermatophagoides farinae*	House dust mite	Unassigned	group 21 allergen [Dermatophagoides farinae]	140089322
626	*Dermatophagoides farinae*	House dust mite	Unassigned	group 21 allergen [Dermatophagoides farinae]	140089320
627	*Dermatophagoides farinae*	House dust mite	Unassigned	group 21 allergen [Dermatophagoides farinae]	140089316
628	*Dermatophagoides farinae*	House dust mite	Unassigned	group 21 allergen [Dermatophagoides farinae]	140089314
629	*Dermatophagoides farinae*	House dust mite	Unassigned	Der f 5.02 allergen [Dermatophagoides farinae]	60679572
630	*Dermatophagoides microceras*	House dust mite	Der m 1	Major mite fecal allergen Der m 1 (Der m I)	127205
631	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	major house dust allergen [Dermatophagoides pteronyssinus]	387592
632	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	Der p 1 allergen precursor [Dermatophagoides pteronyssinus]	256095986
633	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	Der p 1 allergen precursor [Dermatophagoides pteronyssinus]	195933901
634	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	Chain B, C2 Crystal Form Of Mite Allergen Der P 1	223365887
635	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	Der p 1 allergen [Dermatophagoides pteronyssinus]	157696052
636	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	cysteine protease [Dermatophagoides pteronyssinus]	1460058
637	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	Chain B, Crystal Structure Of Mature And Fully Active Der P 1 Allergen	83754033

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638	*Dermatophagoides pteronyssinus*	House dust mite	Der p 1	Major mite fecal allergen Der p 1 precursor (Der p I)	730036
639	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	Der p 1 allergen [Dermatophagoides pteronyssinus]	61608445
640	*Dermatophagoides pteronyssinus*	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725580
641	*Dermatophagoides pteronyssinus*	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725578
642	*Dermatophagoides pteronyssinus*	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725576
643	*Dermatophagoides pteronyssinus*	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725574
644	*Dermatophagoides pteronyssinus*	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725572
645	*Dermatophagoides pteronyssinus*	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725570
646	*Dermatophagoides pteronyssinus*	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725568
647	*Dermatophagoides pteronyssinus*	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725566
648	*Dermatophagoides pteronyssinus*	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725564
649	*Dermatophagoides pteronyssinus*	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725562
650	*Dermatophagoides pteronyssinus*	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725560
651	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	tropomyosin [Dermatophagoides pteronyssinus]	208970286
652	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	tropomyosin [Dermatophagoides pteronyssinus]	80553470

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
653	*Dermatophagoides pteronyssinus*	House dust mite	Der p 10	tropomyosin [Dermatophagoides pteronyssinus]	2440053
654	*Dermatophagoides pteronyssinus*	House dust mite	Der p 10	tropomyosin [Dermatophagoides pteronyssinus]	2353266
655	*Dermatophagoides pteronyssinus*	House dust mite	Der p 11	HDM allergen [Dermatophagoides pteronyssinus]	37778944
656	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	Der p 13 allergen [Dermatophagoides pteronyssinus]	302035350
657	*Dermatophagoides pteronyssinus*	House dust mite	Der p 14	group 14 allergen protein [Dermatophagoides pteronyssinus]	20385544
658	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	Der p 2 allergen precursor [Dermatophagoides pteronyssinus]	256095984
659	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	Der p 2 allergen [Dermatophagoides pteronyssinus]	164415595
660	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	Chain A, Tertiary Structure Of The Major House Dust Mite Allergen Der P 2, Nmr, 10 Structures	157829757
661	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	group 2 allergen Der p 2 [Dermatophagoides pteronyssinus]	110560872
662	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	Der p 2 allergen precursor [Dermatophagoides pteronyssinus]	99644635
663	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	Der p 2 allergen precursor [Dermatophagoides pteronyssinus]	76097509
664	*Dermatophagoides pteronyssinus*	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725604
665	*Dermatophagoides pteronyssinus*	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725602
666	*Dermatophagoides pteronyssinus*	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725600
667	*Dermatophagoides pteronyssinus*	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725596

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
668	*Dermatophagoides pteronyssinus*	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725594
669	*Dermatophagoides pteronyssinus*	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725592
670	*Dermatophagoides pteronyssinus*	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725590
671	*Dermatophagoides pteronyssinus*	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725588
672	*Dermatophagoides pteronyssinus*	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725586
673	*Dermatophagoides pteronyssinus*	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725584
674	*Dermatophagoides pteronyssinus*	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725582
675	*Dermatophagoides pteronyssinus*	House dust mite	Der p 2	Chain A, X-Ray Structure Of Der P 2, The Major House Dust Mite Allergen	21465915
676	*Dermatophagoides pteronyssinus*	House dust mite	Der p 2	Mite group 2 allergen Der p 2 precursor (Der p II) (DPX)	1352237
677	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	allergen precursor [Dermatophagoides pteronyssinus]	85687540
678	*Dermatophagoides pteronyssinus*	House dust mite	Der p 3	Der p 3 allergen	511476
679	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	Alpha-amylase (Allergen Der p 4) (Der p IV)	1351935
680	*Dermatophagoides pteronyssinus*	House dust mite	Der p 4	alpha-amylase [Dermatophagoides pteronyssinus]	5059162
681	*Dermatophagoides pteronyssinus*	House dust mite	Der p 5	Mite allergen Der p 5 (Der P V) (IgE-binding allergen)	1352238
682	*Dermatophagoides pteronyssinus*	House dust mite	Der p 5	unnamed protein product [Dermatophagoides pteronyssinus]	28798085

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
683	*Dermatophagoides pteronyssinus*	House dust mite	Der p 5	Der p V allergen [Dermatophagoides pteronyssinus]	913285
684	*Dermatophagoides pteronyssinus*	House dust mite	Der p 6	Mite allergen Der p 6 (Der p VI) (DP5)	1352239
685	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	Mite allergen Der p 7 precursor (Der p VII)	1352240
686	*Dermatophagoides pteronyssinus*	House dust mite	Der p 7	unnamed protein product [Dermatophagoides pteronyssinus]	10189811
687	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	Glutathione S-transferase (GST class-mu) (Major allergen Der p 8) (P dp 15)	1170095
688	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	glutathione transferase mu class Dp7019C10 [Dermatophagoides pteronyssinus]	60920878
689	*Dermatophagoides pteronyssinus*	House dust mite	Unassigned	group 18 allergen protein [Dermatophagoides pteronyssinus]	67975085
690	*Dermatophagoides siboney*	House dust mite	Unassigned	Der s 2 a allergen [Dermatophagoides siboney]	86450747
691	*Dolichovespula arenaria*	Yellow jacket	Dol a 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Dol a 5) (Dol a V)	465052
692	*Dolichovespula maculata*	Whiteface hornet	Dol m 1	Phospholipase A1 2 (Allergen Dol m 1.02) (Dol m I)	1709542
693	*Dolichovespula maculata*	Whiteface hornet	Dol m 1	Phospholipase A1 1 precursor (Allergen Dol m 1.01) (Dol m I)	548449
694	*Dolichovespula maculata*	Whiteface hornet	Dol m 2	Hyaluronoglucosaminidase (Hyaluronidase) (Allergen Dol m 2) (Dol m II)	1346322
695	*Dolichovespula maculata*	Whiteface hornet	Dol m 5	Venom allergen 5.02 precursor (Antigen 5 form 3) (Ag5-3) (Allergen Dol m 5.02) (Dol m V-B)	549186

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
696	*Dolichovespula maculata*	Whiteface hornet	Dol m 5	Venom allergen 5.01 precursor (Antigen 5 form 2) (Ag5-2) (Allergen Dol m 5.01) (Dol m V-A)	137395
697	*Epicoccum nigrum*	Fungus	Unassigned	Major allergen Epi p 1 (EpI n I4625*)	24636820
698	*Equus caballus*	Horse	Equ c 1	Major allergen Equ c 1 precursor	3121758
699	*Equus caballus*	Horse	Equ c 2.0102	Dander allergen Equ c 2.0102	3121756
700	*Equus caballus*	Horse	Equ c 2.0101	Dander allergen Equ c 2.0101	3121755
701	*Equus caballus*	Horse	Unassigned	Serum albumin precursor (Allergen Equ c 3)	543794
702	*Equus caballus*	Horse	Unassigned	Latherin precursor (Dander allergen Equ c 4/Equ c 5)	152031631
703	*Equus caballus*	Horse	Unassigned	Latherin precursor (Dander allergen Equ c 4/Equ c 5)	38258932
704	*Erimacrus isenbeckii*		Unassigned	tropomyosin slow-tonic isoform [Erimacrus isenbeckii]	125995171
705	*Erimacrus isenbeckii*		Unassigned	tropomyosin slow-twitch isoform [Erimacrus isenbeckii]	125995169
706	*Euphausia pacifica*		Unassigned	tropomyosin [Euphausia pacifica]	156712754
707	*Euphausia superba*		Unassigned	tropomyosin [Euphausia superba]	156712752
708	*Euroglyphus maynei*	House dust mite	Eur m 2	Mite group 2 allergen Eur m 2 precursor	14423649
709	*Euroglyphus maynei*	House dust mite	Eur m 2.0102	group 2 allergen Eur m 2 0102 [Euroglyphus maynei]	3941386
710	*Fagopyrum esculentum*	Buckwheat	Unassigned	16 kDa allergen [Fagopyrum esculentum]	83416591
711	*Fagopyrum esculentum*	Buckwheat	Unassigned	BW 16kDa allergen [Fagopyrum esculentum]	61970231
712	*Fagopyrum esculentum*	Buckwheat	Unassigned	BW8KD allergen protein [Fagopyrum esculentum]	17907758

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
713	*Fagopyrum esculentum*	Buckwheat	Unassigned	13S globulin seed storage protein 3 precursor (Legumin-like protein 3) (Allergen Fag e 1) [Contains: 13S globulin seed storage protein 3 acidic chain; 13S globulin seed storage protein 3 basic chain]	29839419
714	*Fagopyrum esculentum*	Buckwheat	Unassigned	13S globulin seed storage protein 2 precursor (Legumin-like protein 2) [Contains: 13S globulin seed storage protein 2 acidic chain; 13S globulin seed storage protein 2 basic chain]	29839255
715	*Fagopyrum esculentum*	Buckwheat	Unassigned	13S globulin seed storage protein 1 precursor (Legumin-like protein 1) [Contains: 13S globulin seed storage protein 1 acidic chain; 13S globulin seed storage protein 1 basic chain]	29839254
716	*Fagopyrum esculentum*	Buckwheat	Unassigned	vicilin-like protein [Fagopyrum esculentum]	146217148
717	*Fagopyrum gracilipes*	Buckwheat	Unassigned	22kDa storage protein [Fagopyrum gracilipes]	6979766
718	*Fagopyrum tataricum*	Buckwheat	Unassigned	16 kDa major allergen [Fagopyrum tataricum]	320445237
719	*Fagopyrum tataricum*	Buckwheat	Unassigned	BW10KD allergen protein [Fagopyrum tataricum]	144228127
720	*Fagopyrum tataricum*	Buckwheat	Unassigned	allergenic protein [Fagopyrum tataricum]	113200131
721	*Fagus sylvatica*	European Beech	Unassigned	Fag s 1 pollen allergen [Fagus sylvatica]	212291474
722	*Fagus sylvatica*	European Beech	Fag s 1	Fag s 1 pollen allergen [Fagus sylvatica]	212291470

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723	*Fagus sylvatica*	European Beech	Unassigned	Fag s 1 pollen allergen [Fagus sylvatica]	212291472
724	*Farfantepenaeus aztecus*	Brown shrimp	Pen a 1	Pen a 1 allergen [Farfantepenaeus aztecus]	73532979
725	*Felis catus*	Cat	Unassigned	major allergen I, polypeptide chain 1 [Felis catus]	114326420
726	*Felis catus*	Cat	Fel d 1	major allergen I	163825
727	*Felis catus*	Cat	Fel d 1	Major allergen I polypeptide chain 1 major form precursor (Allergen Fel d 1-A) (Fel d I-A) (Allergen Cat-1) (Fel dI) (AG4)	1169665
728	*Felis catus*	Cat	Fel d 1	fel d I chain 1 precursor with leader A [Felis catus]	1364213
729	*Felis catus*	Cat	Fel d 1	fel d I chain 1 precursor with leader B [Felis catus]	1364212
730	*Felis catus*	Cat	Unassigned	fel d I chain 2 precursor [Felis catus]	395407
731	*Felis catus*	Cat	Fel d 1	Major allergen I polypeptide chain 2 precursor (Allergen Fel d 1-B) (Fel d I-B) (Allergen Cat-1) (AG4) (FdI)	232086
732	*Felis catus*	Cat	Unassigned	Serum albumin precursor (Allergen Fel d 2)	1351908
733	*Felis catus*	Cat	Unassigned	Cystatin-A (Allergen Fel d 3)	47605720
734	*Felis catus*	Cat	Unassigned	Allergen Fel d 4 precursor	75062228
735	*Felis catus*	Cat	Unassigned	Fel d 7 allergen precursor [Felis catus]	301072397
736	*Felis catus*	Cat	Unassigned	lipid binding protein [Felis catus]	303387468
737	*Forcipomyia taiwana*	biting midges	Unassigned	serine/threonine protein kinase [Forcipomyia taiwana]	188572341
738	*Forcipomyia taiwana*	biting midges	Unassigned	eukaryotic translation initiation factor [Forcipomyia taiwana]	188572343

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739	*Fragaria x ananassa*	Strawberry	Fra a 1	Fra a 1-A allergen [Fragaria x ananassa]	88082485
740	*Fragaria x ananassa*	Strawberry	Fra a 1	Major strawberry allergen Fra a 1-B [Fragaria x ananassa]	90185682
741	*Fragaria x ananassa*	Strawberry	Fra a 1	Major strawberry allergen Fra a 1-D [Fragaria x ananassa]	90185684
742	*Fragaria x ananassa*	Strawberry	Fra a 1	Major strawberry allergen Fra a 1-C [Fragaria x ananassa]	90185688
743	*Fragaria x ananassa*	Strawberry	Fra a 1	Major strawberry allergen Fra a 1-E [Fragaria x ananassa]	90185692
744	*Fragaria x ananassa*	Strawberry	Fra a 1	[Segment 3 of 3] Allergen Fra a 18 kDa	60389905
745	*Fragaria x ananassa*	Strawberry	Fra a 1	[Segment 2 of 3] Allergen Fra a 18 kDa	60389904
746	*Fraxinus excelsior*	European ash	Fra e 1	allergen Fra e 1.0101 [Fraxinus excelsior]	33327133
747	*Fraxinus excelsior*	European ash	Fra e 1	Fra e 1.0102 major allergen [Fraxinus excelsior]	56122438
748	*Fraxinus excelsior*	European ash	Fra e 1	allergen Fra e 1 [Fraxinus excelsior]	34978692
749	*Fulvia mutica*		Unassigned	tropomyosin [Fulvia mutica]	219806596
750	*Fusarium culmorum*	Fungus	Unassigned	helix-loop-helix protein [Fusarium culmorum]	25361513
751	*Fusarium culmorum*	Fungus	Unassigned	RecName: Full=60S acidic ribosomal protein P2; AltName: Allergen=Fus c 1	41688715
752	*Fusarium culmorum*	Fungus	Unassigned	Thioredoxin-like protein (Allergen Fus c 2)	52783462
753	*Gadus callarias*	Baltic cod	Gad c 1	Parvalbumin beta (Allergen Gad c 1) (Gad c I) (Allergen M)	131112
754	*Gadus morhua*	Atlantic cod	Unassigned	parvalbumin beta [Gadus morhua]	148356693
755	*Gadus morhua*	Atlantic cod	Unassigned	parvalbumin beta [Gadus morhua]	148356691
756	*Gadus morhua*	Atlantic cod	Unassigned	parvalbumin beta [Gadus morhua]	14531016

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757	*Gadus morhua*	Atlantic cod	Unassigned	parvalbumin beta [Gadus morhua]	14531014
758	*Gallus gallus*	Chicken	Unassigned	ovomucoid [Gallus gallus]	209979542
759	*Gallus gallus*	Chicken	Unassigned	ovomucoid [Gallus gallus]	162952006
760	*Gallus gallus*	Chicken	Gal d 1	Ovomucoid precursor (Allergen Gal d 1) (Gal d I)	124757
761	*Gallus gallus*	Chicken	Unassigned	Chain D, Crystal Structure Of S-Ovalbumin At 1.9 Angstrom Resolution	34811333
762	*Gallus gallus*	Chicken	Gal d 2	Chain A, Loop-Inserted Structure Of P1-P1' Cleaved Ovalbumin Mutant R339t	15826578
763	*Gallus gallus*	Chicken	Gal d 2	unnamed protein product [Gallus gallus]	808969
764	*Gallus gallus*	Chicken	Gal d 2	Ovalbumin (Plakalbumin) (Allergen Gal d 2) (Gal d II)	129293
765	*Gallus gallus*	Chicken	Gal d 2	unnamed protein product [Gallus gallus]	63052
766	*Gallus gallus*	Chicken	Gal d 3	Ovotransferrin precursor (Conalbumin) (Allergen Gal d 3) (Gal d III) (Serum transferrin)	1351295
767	*Gallus gallus*	Chicken	Gal d 3	ovotransferrin [Gallus gallus]	757851
768	*Gallus gallus*	Chicken	Gal d 4	lysozyme protein	212279
769	*Gallus gallus*	Chicken	Gal d 4	Lysozyme C precursor (1,4-beta-N-acetylmuramidase C) (Allergen Gal d 4) (Gal d IV)	126608
770	*Gallus gallus*	Chicken	Unassigned	Serum albumin precursor (Alpha-livetin) (Allergen Gal d 5)	113575
771	*Gallus gallus*	Chicken	Unassigned	parvalbumin [Gallus gallus]	225877920

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772	*Gibberella zeae PH-1*	Fungus	Unassigned	RLA2_ALTAL 60S acidic ribosomal protein P2 (Minor allergen Alt a 6) (Alt a VI) [Gibberella zeae PH-1]	46122455
773	*Glossina morsitans morsitans*	Tsetse fly	Unassigned	antigen 5 precursor [Glossina morsitans morsitans]	8927462
774	*Glossina morsitans morsitans*	Tsetse fly	Unassigned	salivary antigen 5 precursor variant [Glossina morsitans morsitans]	289742483
775	*Glossina morsitans morsitans*	Tsetse fly	Unassigned	antigen 5 precursor [Glossina morsitans morsitans]	289742475
776	*Glossina morsitans morsitans*	Tsetse fly	Unassigned	salivary antigen 5 precursor [Glossina morsitans morsitans]	289740263
777	*Glycine max*	Soybean	Unassigned	CG4 beta-conglycinin [Glycine max]	256427
778	*Glycine max*	Soybean	Unassigned	beta-conglycinin storage protein [Glycine max]	169929
779	*Glycine max*	Soybean	Unassigned	beta-conglycinin-alpha subunit	169927
780	*Glycine max*	Soybean	Unassigned	unnamed protein product [Glycine max]	18536
781	*Glycine max*	Soybean	Unassigned	hydrophobic seed protein precursor [Glycine max]	76782249
782	*Glycine max*	Soybean	Unassigned	hydrophobic seed protein precursor-like [Glycine max]	76782247
783	*Glycine max*	Soybean	Gly m 1.0101	Gly m IA allergen, HPS=hydrophobic seed protein {N-terminal} [Glycine max=soybeans, hulls, Peptide Partial, 42 aa]	999355
784	*Glycine max*	Soybean	Gly m 2	hull allergen Gly m 2 - soybean (fragment)	1362049
785	*Glycine max*	Soybean	Unassigned	profilin [Glycine max]	156938901
786	*Glycine max*	Soybean	Gly m 3	Profilin-1 (GmPRO1) (Allergen Gly m 3)	3914435
787	*Glycine max*	Soybean	Gly m 3	profilin [Glycine max]	3021373

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
788	*Glycine max*	Soybean	Unassigned	Stress-induced protein SAM22 (Starvation-associated message 22) (Allergen Gly m 4)	134194
789	*Glycine max*	Soybean	Unassigned	Gly m Bd 28K allergen [Glycine max]	187766755
790	*Glycine max*	Soybean	Unassigned	Gly m Bd 28K allergen [Glycine max]	187766747
791	*Glycine max*	Soybean	Unassigned	Gly m Bd 28K allergen [Glycine max]	187766749
792	*Glycine max*	Soybean	Unassigned	Gly m Bd 28K allergen [Glycine max]	187766751
793	*Glycine max*	Soybean	Unassigned	allergen Gly m Bd 28K [Glycine max]	12697782
794	*Glycine max*	Soybean	Unassigned	Bd 30K [Glycine max]	3097321
795	*Glycine max*	Soybean	Unassigned	34 kDa maturing seed vacuolar thiol protease precursor [Glycine max]	1199563
796	*Glycine max*	Soybean	Unassigned	P34 probable thiol protease precursor	129353
797	*Glycine max*	Soybean	Unassigned	glycinin subunit G1 [Glycine max]	18635
798	*Glycine max*	Soybean	Unassigned	unnamed protein product [Glycine max]	18615
799	*Glycine max*	Soybean	Unassigned	glycinin subunit G2 [Glycine max]	18637
800	*Glycine max*	Soybean	Unassigned	unnamed protein product [Glycine max]	18609
801	*Glycine max*	Soybean	Unassigned	glycinin subunit G3 [Glycine max]	18639
802	*Glycine max*	Soybean	Unassigned	unnamed protein product [Glycine max]	732706
803	*Glycine max*	Soybean	Unassigned	glycinin [Glycine max]	18641
804	*Glycine max*	Soybean	Unassigned	glycinin precursor	169971
805	*Glycine max*	Soybean	Unassigned	glycinin	169969
806	*Glycine max*	Soybean	Unassigned	Major Gly 50 kDa allergen	85681057
807	*Glycine max*	Soybean	Unassigned	Kunitz trypsin inhibitor [Glycine max]	510515
808	*Glycine max*	Soybean	Unassigned	Kunitz trypsin inhibitor KTi2 [Glycine max]	256636

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
809	*Glycine max*	Soybean	Unassigned	Kunitz trypsin inhibitor KTi1 [Glycine max]	256635
810	*Glycine max*	Soybean	Unassigned	Kunitz trypsin inhibitor; KTi [Glycine max]	256429
811	*Glycine max*	Soybean	Unassigned	trypsin inhibitor subtype B [Glycine max]	18772
812	*Glycine max*	Soybean	Unassigned	trypsin inhibitor subtype A [Glycine max]	18770
813	*Glycine soja*	Soybean	Unassigned	A5A4B3 subunit [Glycine soja]	806556
814	*Glycine soja*	Soybean	Unassigned	Gy5 [Glycine soja]	736002
815	*Glycyphagus domesticus*	Storage mite	Unassigned	Mite group 2 allergen Gly d 2.01	48428178
816	*Glycyphagus domesticus*	Storage mite	Unassigned	Mite group 2 allergen Gly d 2.02	48428170
817	*Glycyphagus domesticus*	Storage mite	Unassigned	Gly d 2.03 [Glycyphagus domesticus]	33772588
818	*Haliotis discus discus*	Disk abalone	Unassigned	tropomyosin [Haliotis discus discus]	219806586
819	*Haliotis discus discus*	Disk abalone	Unassigned	paramyosin [Haliotis discus discus]	318609972
820	*Haliotis diversicolor*	Abalone	Unassigned	tropomyosin [Haliotis diversicolor]	9954249
821	*Helianthus annuus*	Sunflower	Hel a 2	profilin [Helianthus annuus]	3581965
822	*Helianthus annuus*	Sunflower	Unassigned	Albumin-8 precursor (Methionine-rich 2S protein) (SFA8)	112745
823	*Helix aspersa*	Brown garden snail	Unassigned	Tropomyosin (Allergen Hel as 1)	42559558
824	*Hevea brasiliensis*	Para rubber tree	Hev b 1	Rubber elongation factor protein (REF) (Allergen Hev b 1)	132270
825	*Hevea brasiliensis*	Para rubber tree	Hev b 10.0103	IgE-binding protein MnSOD [Hevea brasiliensis]	10862818
826	*Hevea brasiliensis*	Para rubber tree	Hev b 10.0102	MnSOD [Hevea brasiliensis]	5777414

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827	*Hevea brasiliensis*	Para rubber tree	Hev b 10.0101	superoxide dismutase (manganese)	348137
828	*Hevea brasiliensis*	Para rubber tree	Hev b 11	putative class I chitinase [Hevea brasiliensis]	14575525
829	*Hevea brasiliensis*	Para rubber tree	Hev b 12	lipid transfer precursor protein [Hevea brasiliensis]	20135538
830	*Hevea brasiliensis*	Para rubber tree	Unassigned	Esterase precursor (Early nodule-specific protein homolog) (Latex allergen Hev b 13)	51315784
831	*Hevea brasiliensis*	Para rubber tree	Unassigned	hevamine [Hevea brasiliensis]	313870530
832	*Hevea brasiliensis*	Para rubber tree	Unassigned	beta-1,3-glucanase [Hevea brasiliensis]	270315180
833	*Hevea brasiliensis*	Para rubber tree	Unassigned	beta-1,3-glucanase form 'RRII Gln 2' [Hevea brasiliensis]	268037674
834	*Hevea brasiliensis*	Para rubber tree	Unassigned	Chain D, Crystal Structure Of The Native Endo Beta-1,3-Glucanase (Hev B 2), A Major Allergen From Hevea Brasiliensis (Space Group P41)	261824817
835	*Hevea brasiliensis*	Para rubber tree	Unassigned	beta-1,3-glucanase [Hevea brasiliensis]	124365253
836	*Hevea brasiliensis*	Para rubber tree	Unassigned	beta-1,3-glucanase [Hevea brasiliensis]	124365251
837	*Hevea brasiliensis*	Para rubber tree	Unassigned	beta-1,3-glucanase [Hevea brasiliensis]	124365249
838	*Hevea brasiliensis*	Para rubber tree	Unassigned	beta-1,3-glucanase [Hevea brasiliensis]	124294785
839	*Hevea brasiliensis*	Para rubber tree	Unassigned	beta-1,3-glucanase [Hevea brasiliensis]	124294783
840	*Hevea brasiliensis*	Para rubber tree	Hev b 2	beta-1,3-glucanase [Hevea brasiliensis]	32765543
841	*Hevea brasiliensis*	Para rubber tree	Hev b 2	beta-1,3-glucanase	1184668
842	*Hevea brasiliensis*	Para rubber tree	Hev b 3	Small rubber particle protein (SRPP) (22 kDa rubber particle protein) (22 kDa RPP) (Latex allergen Hev b 3) (27 kDa natural rubber allergen)	14423933

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843	*Hevea brasiliensis*	Para rubber tree	Unassigned	major latex allergen Hev b 4 [Hevea brasiliensis]	46410859
844	*Hevea brasiliensis*	Para rubber tree	Unassigned	Major latex allergen Hev b 5	7387766
845	*Hevea brasiliensis*	Para rubber tree	Unassigned	hevein [Hevea brasiliensis]	158342650
846	*Hevea brasiliensis*	Para rubber tree	Unassigned	Chain A, Crystal Structure Of A Hev B 6.02 Isoallergen	73535415
847	*Hevea brasiliensis*	Para rubber tree	Hev b 6	prohevein [Hevea brasiliensis]	2832430
848	*Hevea brasiliensis*	Para rubber tree	Hev b 6	Pro-hevein precursor (Major hevein) [Contains: Hevein (Allergen Hev b 6); Win-like protein]	123062
849	*Hevea brasiliensis*	Para rubber tree	Unassigned	putative latex allergen hev b 7.02 [Hevea brasiliensis]	41581137
850	*Hevea brasiliensis*	Para rubber tree	Hev b 7	latex protein allergen Hev b 7 [Hevea brasiliensis]	6707018
851	*Hevea brasiliensis*	Para rubber tree	Unassigned	latex allergen [Hevea brasiliensis]	3288200
852	*Hevea brasiliensis*	Para rubber tree	Hev b 7.02	latex allergen [Hevea brasiliensis]	3087805
853	*Hevea brasiliensis*	Para rubber tree	Hev b 7.01	latex patatin homolog [Hevea brasiliensis]	1916805
854	*Hevea brasiliensis*	Para rubber tree	Hev b 8.0102	Profilin-2 (Pollen allergen Hev b 8.0102)	14423868
855	*Hevea brasiliensis*	Para rubber tree	Hev b 8.0201	Profilin-3 (Pollen allergen Hev b 8.0201)	14423860
856	*Hevea brasiliensis*	Para rubber tree	Hev b 8.0202	Profilin-4 (Pollen allergen Hev b 8.0202)	14423859
857	*Hevea brasiliensis*	Para rubber tree	Hev b 8.0203	Profilin-5 (Pollen allergen Hev b 8.0203)	14423858
858	*Hevea brasiliensis*	Para rubber tree	Hev b 8.0204	Profilin-6 (Pollen allergen Hev b 8.0204)	14423856
859	*Hevea brasiliensis*	Para rubber tree	Hev b 8	Chain A, Latex Profilin Hevb8	11513601
860	*Hevea brasiliensis*	Para rubber tree	Hev b 8	profilin [Hevea brasiliensis]	3183706
861	*Hevea brasiliensis*	Para rubber tree	Unassigned	Enolase 1 (2-phosphoglycerate dehydratase 1) (2-phospho-D-glycerate hydro-lyase 1) (Allergen Hev b 9)	14423688

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
862	*Hevea brasiliensis*	Para rubber tree	Unassigned	Enolase 2 (2-phosphoglycerate dehydratase 2) (2-phospho-D-glycerate hydro-lyase 2) (Allergen Hev b 9)	14423687
863	*Hevea brasiliensis subsp. brasiliensis*	Para rubber tree	Hev b 11	class I chitinase [Hevea brasiliensis subsp. brasiliensis]	27526732
864	*Holcus lanatus*	Velvet grass	Unassigned	pollen allergen Hol l 5b [Holcus lanatus]	11991229
865	*Holcus lanatus*	Velvet grass	Unassigned	group V allergen [Holcus lanatus]	2266625
866	*Holcus lanatus*	Velvet grass	Unassigned	group V grass pollen allergen [Holcus lanatus]	2266623
867	*Holcus lanatus*	Velvet grass	Unassigned	Major pollen allergen Hol l 1 precursor (Hol l I) (Hol l 1.0101 and 1.0102)	1171005
868	*Holcus lanatus*	Velvet grass	Unassigned	major group I allergen Hol l 1 [Holcus lanatus]	3860384
869	*Holcus lanatus*	Velvet grass	Hol l 1.0102	protein with incomplete signal sequence [Holcus lanatus]	1167836
870	*Homarus americanus*	American lobster	Unassigned	Tropomyosin (Allergen Hom a 1)	14285796
871	*Homarus americanus*	American lobster	Unassigned	fast tropomyosin isoform [Homarus americanus]	2660868
872	*Hordeum vulgare*	Barley	Unassigned	Alpha-amylase/trypsin inhibitor CMb precursor (Chloroform/methanol-soluble protein CMb)	585290
873	*Hordeum vulgare*	Barley	Hor v 15	Alpha-amylase inhibitor BMAI-1 precursor (Allergen Hor v 1) (Alpha-amylase flour inhibitor)	2506771
874	*Hordeum vulgare*	Barley	Unassigned	amylase/protease inhibitor	167077
875	*Hordeum vulgare*	Barley	Unassigned	LTP 1 [Hordeum vulgare]	19039
876	*Hordeum vulgare*	Barley	Unassigned	trypsin inhibitor cme precursor [Hordeum vulgare]	1405736
877	*Hordeum vulgare* subsp. *vulgare*	Barley	Unassigned	BDAI-1; Barley dimeric alpha-amylase inhibitor [Hordeum vulgare subsp. vulgare]	3367714
878	*Hordeum vulgare* subsp. *vulgare*	Barley	Unassigned	CMa, component of tetrameric alpha-amylase inhibitor [Hordeum vulgare subsp. vulgare]	439275
879	*Hordeum vulgare subsp. vulgare*	Barley	Unassigned	alpha-amylase inhibitor [Hordeum vulgare subsp. vulgare]	18955

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
880	*Hordeum vulgare subsp. vulgare*	Barley	Unassigned	CMe [Hordeum vulgare subsp. vulgare]	19009
881	*Humulus japonicus*	Japanese hop	Hum j 1	Humj1 [Humulus japonicus]	33113263
882	*Humulus scandens*	Japanese hop	Unassigned	profilin-like protein [Humulus scandens]	34851174
883	*Humulus scandens*	Japanese hop	Unassigned	profilin-like protein [Humulus scandens]	34851176
884	*Juglans nigra*	Black walnut	Jug n 1	2S albumin seed storage protein [Juglans nigra]	31321942
885	*Juglans nigra*	Black walnut	Jug n 2	vicilin seed storage protein [Juglans nigra]	31321944
886	*Juglans regia*	English walnut	Jug r 1	albumin seed storage protein precursor [Juglans regia]	1794252
887	*Juglans regia*	English walnut	Jug r 2	vicilin-like protein precursor [Juglans regia]	6580762
888	*Juglans regia*	English walnut	Unassigned	nonspecific lipid transfer protein [Juglans regia]	209484145
889	*Juglans regia*	English walnut	Unassigned	seed storage protein [Juglans regia]	56788031
890	*Juniperus ashei*	Mountain cedar	Unassigned	Polygalacturonase precursor (PG) (Pectinase) (Major pollen allergen Jun a 2)	47606048
891	*Juniperus ashei*	Mountain cedar	Unassigned	Pathogenesis-related protein precursor (Pollen allergen Jun a 3)	9087177
892	*Juniperus ashei*	Mountain cedar	Unassigned	Major pollen allergen Jun a 1 precursor	9087152
893	*Juniperus oxycedrus*	Juniper	Unassigned	putative allergen jun o 1 [Juniperus oxycedrus]	15139849
894	*Juniperus oxycedrus*	Juniper	Unassigned	Polcalcin Jun o 2 (Calcium-binding pollen allergen Jun o 2)	14423843
895	*Juniperus rigida*	Cedar	Unassigned	PR5 allergen Jun r 3.1 precursor [Juniperus rigida]	38456222
896	*Juniperus rigida*	Cedar	Unassigned	PR5 allergen Jun r 3.2 precursor [Juniperus rigida]	38456224
897	*Juniperus virginiana*	Red cedar	Unassigned	Pathogenesis-related protein precursor (Potential major pollen allergen Jun v 3)	51316532
898	*Juniperus virginiana*	Red cedar	Jun v 1	pollen major allergen 1-1 [Juniperus virginiana]	8843921
899	*Juniperus virginiana*	Red cedar	Jun v 1	pollen major allergen 1-2 [Juniperus virginiana]	8843917
900	*Lens culinaris*	Lentil	Len c 1.0102	allergen Len c 1.0102 [Lens culinaris]	29539111
901	*Lens culinaris*	Lentil	Len c 1.0101	allergen Len c 1.0101 [Lens culinaris]	29539109
902	*Lepidoglyphus destructor*	Storage mite	Lep d 10	Tropomyosin (Allergen Lep d 10)	14423956

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903	*Lepidoglyphus destructor*	Storage mite	Lep d 13	Fatty acid-binding protein (Allergen Lep d 13)	14423714
904	*Lepidoglyphus destructor*	Storage mite	Unassigned	Mite group 2 allergen Lep d 2 precursor (Lep d 1) (Lep d I)	1708793
905	*Lepidoglyphus destructor*	Storage mite	Unassigned	type 2 allergen Lep d 2.042 [Lepidoglyphus destructor]	34495290
906	*Lepidoglyphus destructor*	Storage mite	Unassigned	type 2 allergen Lep d 2.039 [Lepidoglyphus destructor]	34495288
907	*Lepidoglyphus destructor*	Storage mite	Unassigned	type 2 allergen Lep d 2.035 [Lepidoglyphus destructor]	34495286
908	*Lepidoglyphus destructor*	Storage mite	Unassigned	type 2 allergen Lep d 2.031 [Lepidoglyphus destructor]	34495284
909	*Lepidoglyphus destructor*	Storage mite	Unassigned	type 2 allergen Lep d 2.025 [Lepidoglyphus destructor]	34495282
910	*Lepidoglyphus destructor*	Storage mite	Unassigned	type 2 allergen Lep d 2.024 [Lepidoglyphus destructor]	34495280
911	*Lepidoglyphus destructor*	Storage mite	Unassigned	type 2 allergen Lep d 2.023 [Lepidoglyphus destructor]	34495278
912	*Lepidoglyphus destructor*	Storage mite	Unassigned	type 2 allergen Lep d 2.013 [Lepidoglyphus destructor]	34495274
913	*Lepidoglyphus destructor*	Storage mite	Lep d 2	allergen Lep d 1.01	1582222
914	*Lepidoglyphus destructor*	Storage mite	Lep d 2	allergen Lep d 1.02	1582223
915	*Lepidoglyphus destructor*	Storage mite	Lep d 2	Lep D 2 precursor [Lepidoglyphus destructor]	21213900
916	*Lepidoglyphus destructor*	Storage mite	Lep d 2	Lep D 2 precursor [Lepidoglyphus destructor]	21213898
917	*Lepidoglyphus destructor*	Storage mite	Lep d 2	allergen Lep d 1.02 precursor - Lepidoglyphus destructor	2147108
918	*Lepidoglyphus destructor*	Storage mite	Unassigned	type 2 allergen Lep d 5.04 [Lepidoglyphus destructor]	34495294
919	*Lepidoglyphus destructor*	Storage mite	Unassigned	type 2 allergen Lep d 5.02 [Lepidoglyphus destructor]	34495292
920	*Lepidoglyphus destructor*	Storage mite	Lep d 5	Mite allergen Lep d 5	14423651
921	*Lepidoglyphus destructor*	Storage mite	Lep d 7	Mite allergen Lep d 7 precursor	14423650
922	*Lepidorhombus whiffiagonis*		Unassigned	parvalbumin [Lepidorhombus whiffiagonis]	208608078
923	*Lepisma saccharina*	Silverfish	Unassigned	troposmyosin [Lepisma saccharina]	20387029
924	*Lepisma saccharina*	Silverfish	Lep s 1	tropomyosin [Lepisma saccharina]	20387027
925	*Ligustrum vulgare*	Privet	Unassigned	Major pollen allergen Lig v 1	14423737
926	*Ligustrum vulgare*	Privet	Lig v 1.0102	major allergen [Ligustrum vulgare]	3256212
927	*Lilium longiflorum*	Trumpet lily	Unassigned	polygalacturonase [Lilium longiflorum]	73913442
928	*Litchi chinensis*	Lychee nut	Unassigned	profilin [Litchi chinensis]	83317152

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929	*Litchi chinensis*	Lychee nut	Lit c 1	profilin [Litchi chinensis]	15809696
930	*Litopenaeus vannamei*		Unassigned	sarcoplasmic calcium-binding protein [Litopenaeus vannamei]	223403273
931	*Litopenaeus vannamei*		Unassigned	arginine kinase [Litopenaeus vannamei]	115492980
932	*Litopenaeus vannamei*		Unassigned	Lit v 3 allergen myosin light chain [Litopenaeus vannamei]	184198734
933	*Lolium perenne*	Perennial ryegrass	Unassigned	pollen allergen	168316
934	*Lolium perenne*	Perennial ryegrass	Lol p 1	Pollen allergen	75274600
935	*Lolium perenne*	Perennial ryegrass	Lol p 1	pollen allergen	168314
936	*Lolium perenne*	Perennial ryegrass	Lol p 1	Pollen allergen Lol p 1 precursor (Lol p I) (Allergen R7)	126385
937	*Lolium perenne*	Perennial ryegrass	Lol p 11	Major pollen allergen Lol p 11 (Lol p XI)	47605808
938	*Lolium perenne*	Perennial ryegrass	Lol p 2	allergen Lol p II [Lolium perenne]	939932
939	*Lolium perenne*	Perennial ryegrass	Lol p 2	Pollen allergen Lol p 2-A (Lol p II-A)	126386
940	*Lolium perenne*	Perennial ryegrass	Lol p 3	Pollen allergen Lol p 3 (Lol p III)	126387
941	*Lolium perenne*	Perennial ryegrass	Unassigned	pollen allergen Lol p 4 [Lolium perenne]	55859464
942	*Lolium perenne*	Perennial ryegrass		RecName: Full=Major pollen allergen Lol p 5a; AltName: Full=Allergen Lol p Ib; AltName: Full=Allergen Lol p Va; AltName: Allergen=Lol p 5a; Flags: Precursor	332278195
943	*Lolium perenne*	Perennial ryegrass	Lol p 5	pollen allergen [Lolium perenne]	6634467
944	*Lolium perenne*	Perennial ryegrass	Lol p 5	pollen allergen Lol p VA precursor; major allergen [Lolium perenne]	4416516
945	*Lolium perenne*	Perennial ryegrass	Lol p 5	Major pollen allergen Lol p 5b precursor (Lol p Vb)	2498582
946	*Lupinus angustifolius*		Unassigned	conglutin beta [Lupinus angustifolius]	169950562
947	*Lupinus angustifolius*		Unassigned	conglutin beta [Lupinus angustifolius]	149208403
948	*Lupinus angustifolius*		Unassigned	conglutin beta [Lupinus angustifolius]	149208401
949	*Lycopersicon esculentum*	Tomato	Lyc e 1	profilin [Lycopersicon esculentum]	17224229
950	*Lycopersicon esculentum*	Tomato	Lyc e 1	profilin [Lycopersicon esculentum]	16555787
951	*Lycopersicon esculentum*	Tomato	Lyc e 2.0102	minor allergen beta-fructofuranosidase precursor [Lycopersicon esculentum]	18542115

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952	*Lycopersicon esculentum*	Tomato	Lyc e 2.0101	minor allergen beta-fructofuranosidase precursor [Lycopersicon esculentum]	18542113
953	*Lycopersicon esculentum*	Tomato	Unassigned	non-specific lipid transfer protein [Lycopersicon esculentum]	71360930
954	*Lycopersicon esculentum*	Tomato	Unassigned	non-specific lipid transfer protein [Lycopersicon esculentum]	71360928
955	*Macrobrachium rosenbergii*		Unassigned	tropomyosin [Macrobrachium rosenbergii]	288819271
956	*Malassezia furfur*	Yeast	Unassigned	Putative peroxiredoxin (Thioredoxin reductase) (Allergen Mal f 2) (MF1)	3914386
957	*Malassezia furfur*	Yeast	Unassigned	Putative peroxiredoxin (Thioredoxin reductase) (Allergen Mal f 3) (MF2)	3914387
958	*Malassezia furfur*	Yeast	Mala f 4	major allergenic protein Mal f4 [Malassezia furfur]	4587985
959	*Malassezia furfur*	Yeast	Unassigned	Major allergen Mal f 1 precursor (Pit o 1)	13959403
960	*Malassezia sympodialis*	Yeast	Mala s 11	manganese superoxide dismutase [Malassezia sympodialis]	28569698
961	*Malassezia sympodialis*	Yeast	Unassigned	mala s 12 allergen precursor [Malassezia sympodialis]	78038796
962	*Malassezia sympodialis*	Yeast	Unassigned	Chain B, Cross-Reactivity And Crystal Structure Of Malassezia Sympodialis Thioredoxin (Mala S 13), A Member Of A New Pan- Allergen Family	119390336
963	*Malassezia sympodialis*	Yeast	Mala s 5	allergen [Malassezia sympodialis]	4138171
964	*Malassezia sympodialis*	Yeast	Mala s 6	allergen [Malassezia sympodialis]	4138173
965	*Malassezia sympodialis*	Yeast	Mala s 7	allergen [Malassezia sympodialis]	4138175
966	*Malassezia sympodialis*	Yeast	Mala s 8	allergen [Malassezia sympodialis]	7271239
967	*Malassezia sympodialis*	Yeast	Mala s 9	allergen [Malassezia sympodialis]	19069920
968	*Malus x domestica*	Apple	Unassigned	major allergen [Malus x domestica]	886683
969	*Malus x domestica*	Apple	Unassigned	Ribonuclease-like PR-10a	75306007
970	*Malus x domestica*	Apple	Unassigned	Ribonuclease-like PR-10c (Mal d 1.0109)	75306008
971	*Malus x domestica*	Apple	Unassigned	Major allergen Mal d 1 (Allergen Mal d I) (AP15)	42558971
972	*Malus x domestica*	Apple	Unassigned	major allergen Mal d 1.03D [Malus x domestica]	60280851
973	*Malus x domestica*	Apple	Unassigned	major allergen Mal d 1.07 [Malus x domestica]	60280829
974	*Malus x domestica*	Apple	Mal d 1	Major allergen Mal d 1 (Mal d I)	1346478

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975	*Malus x domestica*	Apple	Mal d 1	major allergen Mal d 1 [Malus x domestica]	27922941
976	*Malus x domestica*	Apple	Mal d 1	ypr10 [Malus x domestica]	16555783
977	*Malus x domestica*	Apple	Mal d 1	major allergen mal d 1 [Malus x domestica]	4590388
978	*Malus x domestica*	Apple	Mal d 1	major allergen mal d 1 [Malus x domestica]	4590382
979	*Malus x domestica*	Apple	Mal d 1	major allergen mal d 1 [Malus x domestica]	4590380
980	*Malus x domestica*	Apple	Mal d 1	major allergen mal d 1 [Malus x domestica]	4590378
981	*Malus x domestica*	Apple	Mal d 1	major allergen mal d 1 [Malus x domestica]	4590376
982	*Malus x domestica*	Apple	Mal d 1	major allergen mal d 1 [Malus x domestica]	4590368
983	*Malus x domestica*	Apple	Mal d 1	major allergen mal d 1 [Malus x domestica]	4590366
984	*Malus x domestica*	Apple	Mal d 1	major allergen mal d 1 [Malus x domestica]	4590364
985	*Malus x domestica*	Apple	Mal d 1	major allergen Mal d 1 [Malus x domestica]	1313966
986	*Malus x domestica*	Apple	Unassigned	thaumatin-like protein [Malus x domestica]	218059715
987	*Malus x domestica*	Apple	Unassigned	thaumatin-like protein [Malus x domestica]	218059718
988	*Malus x domestica*	Apple	Unassigned	Thaumatin-like protein 1a precursor (Allergen Mal d 2) (Mdtl1) (Pathogenesis-related protein 5a) (PR-5a)	30316292
989	*Malus x domestica*	Apple	Unassigned	thaumatin-like protein precursor [Malus x domestica]	60418848
990	*Malus x domestica*	Apple	Unassigned	thaumatin-like protein precursor [Malus x domestica]	60418842
991	*Malus x domestica*	Apple	Unassigned	31 kda major allergen/disease resistance protein homolog {N-terminal} [Malus domestica=apple trees, Golden Delicious, fruit, Peptide Partial, 26 aa]	1478293
992	*Malus x domestica*	Apple	Unassigned	Non-specific lipid-transfer protein precursor (LTP) (Allergen Mal d 3)	14423814
993	*Malus x domestica*	Apple	Unassigned	allergen Mal d 3 [Malus x domestica]	38492338
994	*Malus x domestica*	Apple	Unassigned	lipid transfer protein precursor [Malus x domestica]	50659859
995	*Malus x domestica*	Apple	Unassigned	lipid transfer protein precursor [Malus x domestica]	50659879
996	*Malus x domestica*	Apple	Unassigned	lipid transfer protein precursor [Malus x domestica]	50659885
997	*Malus x domestica*	Apple	Unassigned	lipid transfer protein precursor [Malus x domestica]	50659889
998	*Malus x domestica*	Apple	Unassigned	lipid transfer protein precursor [Malus x domestica]	50659891

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999	*Malus x domestica*	Apple	Unassigned	profilin [Malus x domestica]	218059728
1000	*Malus x domestica*	Apple	Unassigned	profilin [Malus x domestica]	218059733
1001	*Malus x domestica*	Apple	Unassigned	profilin [Malus x domestica]	218059730
1002	*Malus x domestica*	Apple	Unassigned	profilin [Malus x domestica]	164510860
1003	*Malus x domestica*	Apple	Unassigned	profilin [Malus x domestica]	164510858
1004	*Malus x domestica*	Apple	Unassigned	profilin [Malus x domestica]	164510842
1005	*Malus x domestica*	Apple	Unassigned	profilin 2 [Malus x domestica]	60418866
1006	*Malus x domestica*	Apple	Unassigned	profilin 2 [Malus x domestica]	60418862
1007	*Malus x domestica*	Apple	Unassigned	profilin 1 [Malus x domestica]	60418858
1008	*Malus x domestica*	Apple	Unassigned	profilin 1 [Malus x domestica]	60418854
1009	*Malus x domestica*	Apple	Mal d 4	profilin [Malus x domestica]	28881455
1010	*Malus x domestica*	Apple	Mal d 4	profilin [Malus x domestica]	28881457
1011	*Malus x domestica*	Apple	Mal d 4	profilin [Malus x domestica]	28881453
1012	*Malus x domestica*	Apple	Mal d 4	Profilin-3 (GD4-5) (Pollen allergen Mal d 4)	14423875
1013	*Malus x domestica*	Apple	Mal d 4	Profilin-2 (GD4-2) (Pollen allergen Mal d 4)	14423874
1014	*Malus x domestica*	Apple	Mal d 4	Profilin-1 (GD4-1) (Pollen allergen Mal d 4)	14423873
1015	*Marsupenaeus japonicus*		Unassigned	tropomyosin fast isoform [Marsupenaeus japonicus]	125995159
1016	*Mercurialis annua*	Annual mercury grass	Mer a 1	Profilin [Mercurialis annua]	2959898
1017	*Metapenaeus ensis*	Greasyback shrimp	Unassigned	Tropomyosin (Allergen Met e 1) (Met e I)	6094504
1018	*Mimachlamys nobilis*	Noble scallop	Unassigned	tropomyosin [Chlamys nobilis]	9954253
1019	*Morus nigra*	Black mulberry	Unassigned	RecName: Full=Non-specific lipid-transfer protein 1; Short=LTP 1; AltName: Allergen=Mor n 3	288561913
1020	*Mus musculus*	Mouse	Mus m 1	Major urinary protein 6 precursor (MUP 6) (Alpha-2U-globulin) (Group 1, BS6) (Allergen Mus m 1)	20178291
1021	*Musa acuminata*	Banana	Mus xp 1	profilin [Musa acuminata]	14161635

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1022	*Myrmecia pilosula*	Jumper ant	Unassigned	Myr p I=allergenic polypeptide {N-teminal} [Myrmecia pilosula=jumper ants, venom, Peptide Partial, 112 aa]	1911819
1023	*Myrmecia pilosula*	Jumper ant	Myr p 1	Pilosulin-1 precursor (Major allergen Myr p 1) (Myr p I) [Contains: Pilosulin-1; Pilosulin-1 65->112; Pilosulin-1 68->112; Pilosulin-1 71->112; Pilosulin-1 86->112]	730091
1024	*Myrmecia pilosula*	Jumper ant	Myr p 2	Allergen Myr p 2 precursor (Myr p II)	2498604
1025	*Myrmecia pilosula*	Jumper ant	Myr p 2	major allergen Myr p II	1587177
1026	*Neptunea polycostata*		Unassigned	tropomyosin [Neptunea polycostata]	219806590
1027	*Nicotiana tabacum*	Tobacco	Unassigned	villin 1 [Nicotiana tabacum]	57283137
1028	*Nicotiana tabacum*	Tobacco	Unassigned	villin 2 [Nicotiana tabacum]	57283139
1029	*Octopus vulgaris*		Unassigned	tropomyosin [Octopus vulgaris]	83715936
1030	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	145313992
1031	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	145313990
1032	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	145313988
1033	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	145313984
1034	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	145313982
1035	*Olea europaea*	Olive tree	Ole e 1	Major pollen allergen (Allergen Ole e 1) (Ole e I)	14424429
1036	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33325115
1037	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329732
1038	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329738
1039	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329744
1040	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329748
1041	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329750
1042	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329752
1043	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329754
1044	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329756
1045	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329758
1046	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	37548753

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1047	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	37724593
1048	*Olea europaea*	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	37724597
1049	*Olea europaea*	Olive tree	Ole e 1.0101	main olive allergen [Olea europaea]	13195753
1050	*Olea europaea*	Olive tree	Ole e 1.0107	Ole e 1 protein [Olea europaea]	2465131
1051	*Olea europaea*	Olive tree	Ole e 1.0106	Ole e 1.0103 protein [Olea europaea]	2465129
1052	*Olea europaea*	Olive tree	Ole e 1.0105	Ole e 1.0102 protein [Olea europaea]	2465127
1053	*Olea europaea*	Olive tree	Unassigned	major allergen OLE6 - common olive (fragment)	1362137
1054	*Olea europaea*	Olive tree	Ole e 1.0103	major allergen OLE5c - common olive	1362136
1055	*Olea europaea*	Olive tree	Ole e 1.0102	major allergen OLE3c - common olive	1362135
1056	*Olea europaea*	Olive tree	Unassigned	major allergen OLE33/OLE37 - common olive (fragment)	1362134
1057	*Olea europaea*	Olive tree	Unassigned	major allergen OLE26 - common olive (fragment)	1362133
1058	*Olea europaea*	Olive tree	Ole e 1	major allergen OLE20 - common olive (fragment)	1362132
1059	*Olea europaea*	Olive tree	Ole e 1.0104	major allergen OLE1c - common olive (fragment)	1362131
1060	*Olea europaea*	Olive tree	Unassigned	major allergen OLE19 - common olive (fragment)	1362130
1061	*Olea europaea*	Olive tree	Unassigned	major allergen OLE17 - common olive (fragment)	1362129
1062	*Olea europaea*	Olive tree	Unassigned	major allergen OLE16 - common olive (fragment)	1362128
1063	*Olea europaea*	Olive tree	Ole e 10	allergen Ole e 10 [Olea europaea]	29465664
1064	*Olea europaea*	Olive tree	Ole e 11.0101	Ole e 11.0101 allergen precursor [Olea europaea]	269996495
1065	*Olea europaea*	Olive tree	Ole e 11.0102	Ole e 11.01 allergen precursor [Olea europaea]	68270856
1066	*Olea europaea*	Olive tree	Unassigned	allergenic thaumatin [Olea europaea]	269996497
1067	*Olea europaea*	Olive tree	Ole e 2	Profilin-3 (Pollen allergen Ole e 2)	3914428
1068	*Olea europaea*	Olive tree	Ole e 2	Profilin-2 (Pollen allergen Ole e 2)	3914427
1069	*Olea europaea*	Olive tree	Ole e 2	Profilin-1 (Pollen allergen Ole e 2)	3914426
1070	*Olea europaea*	Olive tree	Ole e 3	Ole e 3 allergen [Olea europaea]	37725377
1071	*Olea europaea*	Olive tree	Ole e 3	calcium-binding pollen allergen [Olea europaea]	3337403
1072	*Olea europaea*	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962611

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1073	*Olea europaea*	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962597
1074	*Olea europaea*	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962591
1075	*Olea europaea*	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962587
1076	*Olea europaea*	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962583
1077	*Olea europaea*	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962577
1078	*Olea europaea*	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962557
1079	*Olea europaea*	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962547
1080	*Olea europaea*	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962543
1081	*Olea europaea*	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347138
1082	*Olea europaea*	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347134
1083	*Olea europaea*	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347130
1084	*Olea europaea*	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347126
1085	*Olea europaea*	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347124
1086	*Olea europaea*	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347122
1087	*Olea europaea*	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347120
1088	*Olea europaea*	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347112
1089	*Olea europaea*	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347108
1090	*Olea europaea*	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347106
1091	*Olea europaea*	Olive tree	Unassigned	pollen allergen Ole e 5 [Olea europaea]	145313972
1092	*Olea europaea*	Olive tree	Ole e 5	Superoxide dismutase [Cu-Zn] (Allergen Ole e 5) (Ole e V)	122064581
1093	*Olea europaea*	Olive tree	Ole e 6	Pollen allergen Ole e 6	14423643
1094	*Olea europaea*	Olive tree	Ole e 7	Pollen allergen Ole e 7 (Ole e VII)	22002032
1095	*Olea europaea*	Olive tree	Ole e 8	Calcium-binding allergen Ole e 8 (PCA18/PCA23)	14423648
1096	*Olea europaea*	Olive tree	Ole e 8	calcium-binding protein [Olea europaea]	6901654
1097	*Olea europaea*	Olive tree	Unassigned	Chain A, Solution Structure Of The C-Terminal Domain Ole E 9	166235350

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1098	*Olea europaea*	Olive tree	Ole e 9	beta-1,3-glucanase-like protein [Olea europaea]	14279169
1099	*Ommastrephes bartramii*		Unassigned	tropomyosin [Ommastrephes bartramii]	83715934
1100	*Onchocerca volvulus*	Parasitic nematode	Unassigned	RecName: Full=Tropomyosin; AltName: Full=MOv-14; AltName: Full=Ov-tmy-1	42559586
1101	*Oncorhynchus mykiss*		Unassigned	RecName: Full=Parvalbumin beta 2	288559140
1102	*Oncorhynchus mykiss*		Unassigned	RecName: Full=Parvalbumin beta 1	288559139
1103	*Oratosquilla oratoria*		Unassigned	tropomyosin [Oratosquilla oratoria]	162286975
1104	*Oryza sativa*	Rice	Unassigned	Lactoylglutathione lyase (Methylglyoxalase) (Aldoketomutase) (Glyoxalase I) (Glx I) (Ketone-aldehyde mutase) (S-D-lactoylglutathione methylglyoxal lyase) (Allergen Ory s ?) (Allergen Glb33) (PP33)	84029333
1105	*Oryza sativa*	Rice	Ory s 1	Ory s 1	1173557
1106	*Oryza sativa*	Rice	Unassigned	beta-expansin [Oryza sativa]	8118439
1107	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	glyoxalase I [Oryza sativa (japonica cultivar-group)]	16580747
1108	*Oryza sativa* (*japonica* cultivar-group)	Rice	Ory s 1	Expansin-B1 precursor (OsEXPB1) (Beta-expansin-1) (OsaEXPb1.2) (OsaEXPb1.3) (Major pollen allergen Ory s 1) (Ory s I)	109913547
1109	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	allergen RA5B precursor [Oryza sativa (japonica cultivar-group)]	23495787
1110	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	allergen RA16 [Oryza sativa (japonica cultivar-group)]	23616954
1111	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	Seed allergenic protein RAG1 precursor (Seed allergenic protein RA17)	114152864
1112	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	Seed allergenic protein RAG2 precursor (Seed allergenic protein RA14)	114152865
1113	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	putative allergenic protein [Oryza sativa (japonica cultivar-group)]	23616947
1114	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa]	2827316

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1115	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	1398918
1116	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	1398916
1117	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	1398915
1118	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	1398913
1119	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	1304218
1120	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	1304217
1121	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	1304216
1122	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	218197
1123	*Oryza sativa* (*japonica* cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	218193
1124	*Ostrya carpinifolia*		Unassigned	pollen allergen [Ostrya carpinifolia]	300872535
1125	*Pachycondyla chinensis*		Unassigned	Pac c 3 allergen [Pachycondyla chinensis]	169822894
1126	*Pandalus borealis*		Unassigned	tropomyosin, allergen Pan b 1 [Pandalus borealis]	312831088
1127	*Pandalus eous*		Unassigned	tropomyosin fast isoform [Pandalus eous]	125995161
1128	*Panulirus stimpsoni*	Lobster	Unassigned	Tropomyosin (Allergen Pan s 1) (Pan s I)	14285797
1129	*Paralithodes camtschaticus*		Unassigned	tropomyosin slow-tonic isoform [Paralithodes camtschaticus]	125995165
1130	*Paralithodes camtschaticus*		Unassigned	tropomyosin fast isoform [Paralithodes camtschaticus]	125995163
1131	*Parietaria judaica*	Weed	Par j 1.0101	Probable nonspecific lipid-transfer protein (LTP) (Major pollen allergen Par j 1.0101) (Par j I) (P5 protein)	3915783
1132	*Parietaria judaica*	Weed	Par j 1.0201	Probable nonspecific lipid-transfer protein 1 precursor (LTP) (Major pollen allergen Par j 1.0201) (Par j I) (P1 protein)	2497749

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1133	*Parietaria judaica*	Weed	Par j 1.0102	P9 protein [Parietaria judaica]	1532058
1134	*Parietaria judaica*	Weed	Par j 1	major allergen Par j I	741844
1135	*Parietaria judaica*	Weed	Par j 2.0101	Probable nonspecific lipid-transfer protein 2 precursor (LTP 2) (Major pollen allergen Par j 2.0101) (Par j II) (P2 protein)	2497750
1136	*Parietaria judaica*	Weed	Par j 2.0102	P8 protein [Parietaria judaica]	1532056
1137	*Parietaria judaica*	Weed	Par j 3	Profilin-1 (Pollen allergen Par j 3)	14423876
1138	*Parietaria judaica*	Weed	Par j 3	Profilin-2 (Pollen allergen Par j 3)	14423869
1139	*Parietaria officinalis*	Weed	Par o 1	Pollen major allergen Par o I	75139847
1140	*Parietaria officinalis*	Weed	Unassigned	Par o 1a=acidic allergen isoform {N-terminal} [Parietaria officinalis=pellitory, pollen, Peptide Partial, 25 aa]	1836010
1141	*Parietaria officinalis*	Weed	Par o 1	Par o 1b=basic allergen isoform {N-terminal} [Parietaria officinalis=pellitory, pollen, Peptide Partial, 24 aa]	1836011
1142	*Parietaria officinalis*	Weed	Par o 1	mAb 8B6-reactive major allergen {N-terminal} [Parietaria officinalis, pollen, Peptide Partial, 30 aa]	1311513
1143	*Parietaria officinalis*	Weed	Par o 1	mAb 3F8-reactive major allergen {N-terminal} [Parietaria officinalis, pollen, Peptide Partial, 15 aa]	1311512
1144	*Parietaria officinalis*	Weed	Par o 1	mAb 8C7-reactive major allergen {N-terminal, band 2} [Parietaria officinalis, pollen, Peptide Partial, 15 aa]	1311511
1145	*Parietaria officinalis*	Weed	Par o 1	mAb 8C7-reactive major allergen {N-terminal, band 1} [Parietaria officinalis, pollen, Peptide Partial, 15 aa]	1311510
1146	*Parietaria officinalis*	Weed	Par o 1	mAb 2F9-reactive major allergen {N-terminal} [Parietaria officinalis, pollen, Peptide Partial, 17 aa]	1311509
1147	*Paspalum notatum*	Bahia grass	Unassigned	group 13 grass pollen allergen [Paspalum notatum]	338930672
1148	*Paspalum notatum*	Bahia grass	Unassigned	group 13 grass pollen allergen [Paspalum notatum]	338930674
1149	*Paspalum notatum*	Bahia grass	Unassigned	group 13 grass pollen allergen [Paspalum notatum]	338930676
1150	*Paspalum notatum*	Bahia grass	Unassigned	group 13 grass pollen allergen [Paspalum notatum]	338930678
1151	*Paspalum notatum*	Bahia grass	Unassigned	group 13 grass pollen allergen [Paspalum notatum]	338930680
1152	*Paspalum notatum*	Bahia grass	Unassigned	group 13 grass pollen allergen [Paspalum notatum]	338930682

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1153	*Paspalum notatum*	Bahia grass	Unassigned	group 13 grass pollen allergen [Paspalum notatum]	338930684
1154	*Paspalum notatum*	Bahia grass	Unassigned	group 13 grass pollen allergen [Paspalum notatum]	338930686
1155	*Paspalum notatum*	Bahia grass	Unassigned	Pas n 1 allergen precursor [Paspalum notatum]	168419914
1156	*Penaeus monodon*	Black tiger shrimp	Unassigned	tropomyosin fast isoform [Penaeus monodon]	125995157
1157	*Penaeus monodon*	Black tiger shrimp	Unassigned	RecName: Full=Arginine kinase; Short=AK; AltName: Allergen=Pen m 2	308154236
1158	*Penaeus monodon*	Black tiger shrimp	Pen m 2	allergen Pen m 2 [Penaeus monodon]	27463265
1159	*Penaeus monodon*	Black tiger shrimp	Unassigned	myosin light chain [Penaeus monodon]	317383196
1160	*Penaeus monodon*	Black tiger shrimp	Unassigned	sarcoplasmic calcium binding protein [Penaeus monodon]	317383198
1161	*Penicillium brevicompactum*	Fungus	Unassigned	60S acidic ribosomal P1 phosphoprotein Pen b 26 [Penicillium brevicompactum]	59894749
1162	*Penicillium chrysogenum*	Fungus	Pen ch 18	vacuolar serine protease [Penicillium chrysogenum]	14215732
1163	*Penicillium chrysogenum*	Fungus	Pen ch 18	allergen Pen n 18 [Penicillium chrysogenum]	7963902
1164	*Penicillium chrysogenum*	Fungus	Pen ch 13	alkaline serine protease [Penicillium chrysogenum]	21069093
1165	*Penicillium chrysogenum*	Fungus	Pen ch 13	allergen Pen n 13 [Penicillium chrysogenum]	6684758
1166	*Penicillium chrysogenum*	Fungus	Pen ch 20	68 kDa allergen [Penicillium chrysogenum]	999009
1167	*Penicillium citrinum*	Fungus	Unassigned	vacuolar serine protease [Penicillium citrinum]	12005501
1168	*Penicillium citrinum*	Fungus	Unassigned	alkaline serine protease Pen c2 [Penicillium citrinum]	4588118
1169	*Penicillium citrinum*	Fungus	Pen c 19	Heat shock 70 kDa protein (Allergen Pen c 19)	14423733
1170	*Penicillium citrinum*	Fungus	Unassigned	Enolase (2-phosphoglycerate dehydratase) (2-phospho-D-glycerate hydro-lyase) (Allergen Pen c 22)	74664773
1171	*Penicillium citrinum*	Fungus	Pen c 24	unknown [Penicillium citrinum]	38326693
1172	*Penicillium citrinum*	Fungus	Pen c 3	peroxisomal membrane protein [Penicillium citrinum]	5326864
1173	*Penicillium citrinum*	Fungus	Unassigned	Pen c 1; alkaline serine protease [Penicillium citrinum]	4587983
1174	*Penicillium oxalicum*	Fungus	Pen o 18	vacuolar serine protease [Penicillium oxalicum]	12005497
1175	*Periplaneta americana*	American cockroach	Unassigned	tropomyosin [Periplaneta americana]	239740599
1176	*Periplaneta americana*	American cockroach	Unassigned	Tropomyosin (Major allergen Per a 7)	14423957

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1177	*Periplaneta americana*	American cockroach	Per a 7.0101	tropomyosin [Periplaneta americana]	4378573
1178	*Periplaneta americana*	American cockroach	Unassigned	major allergen Cr-PII [Periplaneta americana]	284518361
1179	*Periplaneta americana*	American cockroach	Unassigned	major allergen Per a 1.0105 [Periplaneta americana]	30144660
1180	*Periplaneta americana*	American cockroach	Per a 1.0101	major allergen Per a 1.0101 [Periplaneta americana]	4240399
1181	*Periplaneta americana*	American cockroach	Per a 1.0102	allergen [Periplaneta americana]	2897849
1182	*Periplaneta americana*	American cockroach	Per a 1	Cr-PII [Periplaneta americana]	2580504
1183	*Periplaneta americana*	American cockroach	Per a 1.0104	Cr-PII allergen [Periplaneta americana]	2253610
1184	*Periplaneta americana*	American cockroach	Per a 1	Cr-PII allergen [Periplaneta americana]	2231297
1185	*Periplaneta americana*	American cockroach	Unassigned	Per a 3 allergen [Periplaneta americana]	289721058
1186	*Periplaneta americana*	American cockroach	Unassigned	major allergen Cr-PI [Periplaneta americana]	284518363
1187	*Periplaneta americana*	American cockroach	Per a 3.0101	Allergen Cr-PI precursor (Allergen Per a 3)	2833325
1188	*Periplaneta americana*	American cockroach	Per a 3.0203	allergen [Periplaneta americana]	1580797
1189	*Periplaneta americana*	American cockroach	Per a 3.0202	allergen [Periplaneta americana]	1580794
1190	*Periplaneta americana*	American cockroach	Per a 3.0201	allergen [Periplaneta americana]	1531589
1191	*Periplaneta americana*	American cockroach	Unassigned	Per a 4 allergen variant 1 [Periplaneta americana]	212675312
1192	*Periplaneta americana*	American cockroach	Unassigned	Chain A, Crystal Structure Of Major Allergens, Per A 4 From Cockroaches	215794707
1193	*Periplaneta americana*	American cockroach	Unassigned	Per a 4 allergen [Periplaneta americana]	60678787
1194	*Periplaneta fuliginosa*	Smokybrown cockroach	Unassigned	tropomyosin [Periplaneta fuliginosa]	19310971
1195	*Perna viridis*	Asian green mussell	Unassigned	tropomyosin [Perna viridis]	9954251
1196	*Persea americana*	Avocado	Pers a 1	endochitinase [Persea americana]	3201547
1197	*Phalaris aquatica*	Canary grass	Pha a 1	Major pollen allergen Pha a 1 precursor (Pha a I)	2498576
1198	*Phalaris aquatica*	Canary grass	Unassigned	Pha a I=34 kda pollen allergen {N-terminal} [Phalaris aquatica=canary grass, Peptide Partial, 20 aa]	409328
1199	*Phalaris aquatica*	Canary grass	Unassigned	Major pollen allergen Pha a 5.4 (Pha a 5) (Clone 5)	2498580
1200	*Phalaris aquatica*	Canary grass	Unassigned	Major pollen allergen Pha a 5.3 precursor (Pha a 5) (Clone 29)	2498579

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1201	*Phalaris aquatica*	Canary grass	Unassigned	Major pollen allergen Pha a 5.2 precursor (Pha a 5) (Clone 14)	2498578
1202	*Phalaris aquatica*	Canary grass	Unassigned	Major pollen allergen Pha a 5.1 precursor (Pha A 5) (Clone 28)	2498577
1203	*Phaseolus vulgaris*	Kidney bean	Unassigned	non-specific lipid transfer protein 1b precursor [Phaseolus vulgaris]	289064179
1204	*Phaseolus vulgaris*	Kidney bean	Unassigned	non-specific lipid transfer protein 1a precursor [Phaseolus vulgaris]	289064177
1205	*Phleum pratense*	Common timothy	Unassigned	allergen PhI p I	1582250
1206	*Phleum pratense*	Common timothy	Unassigned	Pollen allergen Phl p 1 precursor (Phl p I)	1171008
1207	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	45823012
1208	*Phleum pratense*	Common timothy	Phl p 1	Chain A, Crystal Structure Of Phl P 1, A Major Timothy Grass Pollen Allergen	28373838
1209	*Phleum pratense*	Common timothy	Phl p 1.0101	pollen allergen Phl pI [Phleum pratense]	3901094
1210	*Phleum pratense*	Common timothy	Unassigned	Pollen allergen Phl p 11	47606039
1211	*Phleum pratense*	Common timothy	Phl p 12	profilin 4 [Phleum pratense]	2415702
1212	*Phleum pratense*	Common timothy	Phl p 12	profilin 3 [Phleum pratense]	2415700
1213	*Phleum pratense*	Common timothy	Phl p 12	Profilin-1 (Pollen allergen Phl p 12) (Phl p 11)	464471
1214	*Phleum pratense*	Common timothy	Phl p 13	polygalacturonase [Phleum pratense]	4826572
1215	*Phleum pratense*	Common timothy	Unassigned	Pollen allergen Phl p 2 precursor (Phl p II)	1171009
1216	*Phleum pratense*	Common timothy	Unassigned	pollen allergen Phl p 4.0204 [Phleum pratense]	189014272
1217	*Phleum pratense*	Common timothy	Unassigned	pollen allergen Phl p 4.0203 [Phleum pratense]	189014270
1218	*Phleum pratense*	Common timothy	Unassigned	pollen allergen Phl p 4.0202 [Phleum pratense]	189014268
1219	*Phleum pratense*	Common timothy	Unassigned	pollen allergen Phl p 4.0102 [Phleum pratense]	189014266
1220	*Phleum pratense*	Common timothy	Unassigned	major pollen allergen Phl p 4 precursor [Phleum pratense]	82492267
1221	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	45108967
1222	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	45108973

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1223	*Phleum pratense*	Common timothy	Unassigned	pollen allergen Phl p 4 [Phleum pratense]	54144332
1224	*Phleum pratense*	Common timothy	Phl p 5	Pollen allergen Phl p V	75139900
1225	*Phleum pratense*	Common timothy	Unassigned	phl p5a allergen precursor [Phleum pratense]	29500897
1226	*Phleum pratense*	Common timothy	Phl p 5	Chain A, Crystal Structure Of The Functional Domain Of The Major Grass Pollen Allergen Phl P 5b	28948464
1227	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725632
1228	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725630
1229	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725628
1230	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725626
1231	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725624
1232	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725622
1233	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725620
1234	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725618
1235	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725616
1236	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725614
1237	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725612
1238	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725610
1239	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725608
1240	*Phleum pratense*	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725606
1241	*Phleum pratense*	Common timothy	Phl p 5	group V allergen Phl p 5 precursor [Phleum pratense]	13430402
1242	*Phleum pratense*	Common timothy	Unassigned	group V allergen Phl p 5.0207 precursor [Phleum pratense]	3309047
1243	*Phleum pratense*	Common timothy	Unassigned	group V allergen Phl p 5.0206 precursor [Phleum pratense]	3309045
1244	*Phleum pratense*	Common timothy	Unassigned	group V allergen Phl p 5.0203 precursor [Phleum pratense]	3309041
1245	*Phleum pratense*	Common timothy	Phl p 5.0103	group V allergen Phl p 5.0103 precursor [Phleum pratense]	3309039
1246	*Phleum pratense*	Common timothy	Phl p 5.0108	major allergen Phl p 5 [Phleum pratense]	3135503
1247	*Phleum pratense*	Common timothy	Phl p 5.0107	major allergen Phl p 5 [Phleum pratense]	3135501
1248	*Phleum pratense*	Common timothy	Phl p 5.0106	major allergen Phl p 5 [Phleum pratense]	3135499

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1249	*Phleum pratense*	Common timothy	Phl p 5.0105	major allergen Phl p 5 [Phleum pratense]	3135497
1250	*Phleum pratense*	Common timothy	Phl p 5	Pollen allergen Phl p 5b precursor (Phl p Vb)	2851457
1251	*Phleum pratense*	Common timothy	Phl p 5	Major Pollen Allergen Phl p Va [Phleum pratense]	2398757
1252	*Phleum pratense*	Common timothy	Phl p 5.0104	major allergen Phl p 5 [Phleum pratense]	1684720
1253	*Phleum pratense*	Common timothy	Phl p 5.0202	major allergen Phl p 5 [Phleum pratense]	1684718
1254	*Phleum pratense*	Common timothy	Unassigned	major allergen Phl p Va	1092249
1255	*Phleum pratense*	Common timothy	Phl p 5	allergen Phl p Vb - common timothy	481397
1256	*Phleum pratense*	Common timothy	Phl p 5	PHLP5A protein - common timothy (fragment)	422005
1257	*Phleum pratense*	Common timothy	Phl p 5.0101	Phlp5 [Phleum pratense]	398830
1258	*Phleum pratense*	Common timothy	Unassigned	Chain N, Crystal Structure Of Phl P 6, A Major Timothy Grass Pollen Allergen Co-Crystallized With Zinc	28374072
1259	*Phleum pratense*	Common timothy	Unassigned	Phl p6 IgE binding fragment [Phleum pratense]	3004469
1260	*Phleum pratense*	Common timothy	Phl p 6	Phl p6 allergen [Phleum pratense]	3004467
1261	*Phleum pratense*	Common timothy	Phl p 6	Phl p6 allergen [Phleum pratense]	3004465
1262	*Phleum pratense*	Common timothy	Unassigned	Polcalcin Phl p 7 (Calcium-binding pollen allergen Phl p 7) (P7)	14423846
1263	*Phoenix dactylifera*	Date palm	Pho d 2	profilin [Phoenix dactylifera]	21322677
1264	*Pistacia vera*		Unassigned	Pis v 2.0201 allergen 11S globulin precusor [Pistacia vera]	110349085
1265	*Pistacia vera*		Unassigned	Pis v 2.0101 allergen11S globulin precusor [Pistacia vera]	110349083
1266	*Pistacia vera*		Unassigned	11S globulin [Pistacia vera]	156001070
1267	*Pistacia vera*		Unassigned	Pis v 1 allergen 2S albumin [Pistacia vera]	110349081
1268	*Pistacia vera*		Unassigned	vicilin [Pistacia vera]	133711974
1269	*Pisum sativum*	Pea	Pis s 1	Vicilin [Pisum sativum]	42414627
1270	*Pisum sativum*	Pea	Pis s 1	Vicilin [Pisum sativum]	42414629
1271	*Plantago lanceolata*	Narrow-leaved plantain	Unassigned	unnamed protein product [Plantago lanceolata]	29163773
1272	*Plantago lanceolata*	Narrow-leaved plantain	Pla l 1	plantain pollen major allergen, Pla l 1.0103 [Plantago lanceolata]	14422363

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1273	*Plantago lanceolata*	Narrow-leaved plantain	Pla l 1	plantain pollen major allergen, Pla l 1.0102 [Plantago lanceolata]	14422361
1274	*Plantago lanceolata*	Narrow-leaved plantain	Pla l 1	plantain pollen major allergen, Pla l 1.0101 [Plantago lanceolata]	14422359
1275	*Platanus orientalis*		Unassigned	pollen allergen Pla o 1 [Platanus orientalis]	162949336
1276	*Platanus x acerifolia*	London plane tree	Unassigned	Putative invertase inhibitor precursor (Pollen allergen Pla a 1)	29839547
1277	*Platanus x acerifolia*	London plane tree	Pla a 2	polygalacturonase [Platanus x acerifolia]	49523394
1278	*Plodia interpunctella*	Indian meal moth	Unassigned	arginine kinase [Plodia interpunctella]	15886861
1279	*Poa pratensis*	Kentucky bluegrass	Unassigned	pollen allergen (group II) [Poa pratensis]	4007655
1280	*Poa pratensis*	Kentucky bluegrass	Poa p 1	group I pollen allergen [Poa pratensis]	4090265
1281	*Poa pratensis*	Kentucky bluegrass	Poa p 1	pollen allergen Poa p I - Kentucky bluegrass (fragment)	320620
1282	*Poa pratensis*	Kentucky bluegrass	Poa p 1	pollen allergen Poa-pI - Kentucky bluegrass (fragment)	280414
1283	*Poa pratensis*	Kentucky bluegrass	Poa p 5	pollen allergen Poa p 5 [Poa pratensis]	11991227
1284	*Poa pratensis*	Kentucky bluegrass	Unassigned	Pollen allergen KBG 31 precursor (Pollen allergen Poa p 9) (Poa p IX)	113560
1285	*Poa pratensis*	Kentucky bluegrass	Unassigned	Pollen allergen KBG 41 precursor (Pollen allergen Poa p 9) (Poa p IX)	113561
1286	*Poa pratensis*	Kentucky bluegrass	Unassigned	pollen allergen (clone 7.2) - Kentucky bluegrass (fragment)	539056
1287	*Poa pratensis*	Kentucky bluegrass	Unassigned	Pollen allergen KBG 60 precursor (Pollen allergen Poa p 9) (Poa p IX)	113562
1288	*Polistes annularis*	Paper wasp	Pol a 1	Phospholipase A1 (Allergen Pol a 1)	14423833
1289	*Polistes annularis*	Paper wasp	Pol a 2	Hyaluronoglucosaminidase precursor (Hyaluronidase) (Allergen Pol a 2)	14423735
1290	*Polistes annularis*	Paper wasp	Pol a 5	allergen 5	160780
1291	*Polistes dominulus*	Paper wasp	Unassigned	venom phospholipase A1 1 precursor [Polistes dominulus]	45510887
1292	*Polistes dominulus*	Paper wasp	Unassigned	venom phospholipase A1 2 precursor [Polistes dominulus]	45510889
1293	*Polistes dominulus*	Paper wasp	Unassigned	venom phospholipase A1 3 precursor [Polistes dominulus]	45510891

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1294	*Polistes dominulus*	Paper wasp	Unassigned	venom phospholipase A1 4 precursor [Polistes dominulus]	45510893
1295	*Polistes dominulus*	Paper wasp	Pol d 5	allergen Pol d 5 precursor [Polistes dominulus]	51093377
1296	*Polistes dominulus*	Paper wasp	Unassigned	venom serine protease precursor [Polistes dominulus]	30909091
1297	*Polistes exclamans*	Paper wasp	Unassigned	allergen Pol e 5 precursor [Polistes exclamans]	51093375
1298	*Polistes exclamans*	Paper wasp	Pol e 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Pol e 5) (Pol e V)	549187
1299	*Polistes fuscatus*	Paper wasp	Pol f 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Pol f 5) (Pol f V)	549188
1300	*Polistes gallicus*	Paper wasp	Unassigned	Phospholipase A1 (Allergen Pol g 1)	41017429
1301	*Polistes gallicus*	Paper wasp	Pol g 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Pol g 5)	25091511
1302	*Polybia paulista*	wasp	Unassigned	RecName: Full=Hyaluronidase; Short=Hya; AltName: Full=Hyaluronoglucosaminidase	302425085
1303	*Polybia paulista*	wasp	Unassigned	hyaluronidase precursor [Polybia paulista]	302201583
1304	*Polybia paulista*	wasp	Unassigned	RecName: Full=Venom allergen 5; AltName: Full=Antigen 5; Short=Ag5	302595972
1305	*Polybia paulista*	wasp	Unassigned	venom allergen 5 [Polybia paulista]	290792375
1306	*Polybia paulista*	wasp	Unassigned	phospholipase A1 [Polybia paulista]	315190620
1307	*Polybia paulista*	wasp	Pol p 1.0101	Venom phospholipase A1 precursor (Allergen Poly p 1)	166216292
1308	*Protortonia cacti*		Unassigned	cochineal major allergen [Protortonia cacti]	237769615
1309	*Prunus armeniaca*	Apricot	Unassigned	non-specific lipid transfer protein [Prunus armeniaca]	313575736
1310	*Prunus armeniaca*	Apricot	Unassigned	non-specific lipid transfer protein [Prunus armeniaca]	313575734
1311	*Prunus armeniaca*	Apricot	Unassigned	non-specific lipid transfer protein [Prunus armeniaca]	313575732
1312	*Prunus armeniaca*	Apricot	Unassigned	non-specific lipid transfer protein [Prunus armeniaca]	313575730
1313	*Prunus avium*	Cherry	Unassigned	Chain A, Solution Structure Of The Major Cherry Allergen Pru Av 1 Mutant E45w	159162378
1314	*Prunus avium*	Cherry	Pru av 1	major cherry allergen Pru av 1.0201 [Prunus avium]	44409451
1315	*Prunus avium*	Cherry	Pru av 1	major cherry allergen Pru av 1.0202 [Prunus avium]	44409474
1316	*Prunus avium*	Cherry	Pru av 1	major cherry allergen Pru av 1.0203 [Prunus avium]	44409496

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1317	*Prunus avium*	Cherry	Pru av 1	cherry-allergen PRUA1	1513216
1318	*Prunus avium*	Cherry	Unassigned	non-specific lipid transfer protein [Prunus avium]	313575728
1319	*Prunus avium*	Cherry	Unassigned	non-specific lipid transfer protein [Prunus avium]	313575726
1320	*Prunus avium*	Cherry	Pru av 3	lipid transfer protein precursor [Prunus avium]	6715520
1321	*Prunus avium*	Cherry	Pru av 4	profilin [Prunus avium]	4761582
1322	*Prunus avium*	Cherry	Pru av 2	thaumatin-like protein precursor	1144346
1323	*Prunus domestica*	Plum	Pru d 3	Nonspecific lipid-transfer protein 1 (LTP 1) (Major allergen Pru d 3)	9297015
1324	*Prunus dulcis*	Almond	Pru du 4	profilin [Prunus dulcis]	24473794
1325	*Prunus dulcis*	Almond	Unassigned	Chain A, Crystal Structure Of Pru Du Amandin, An Allergenic Protein From Prunus Dulcis	258588247
1326	*Prunus dulcis*	Almond	Unassigned	Seed allergenic protein 2 (Conglutin gamma) (Allergen Pru du ?)	75107131
1327	*Prunus dulcis x Prunus persica*		Unassigned	putative allergen Pru du 4.02 [Prunus dulcis x Prunus persica]	190613937
1328	*Prunus dulcis x Prunus persica*		Unassigned	putative allergen Pru du 4.01 [Prunus dulcis x Prunus persica]	190613933
1329	*Prunus dulcis x Prunus persica*		Pru p 2.0301	putative allergen Pru p 2.02 [Prunus dulcis x Prunus persica]	190613903
1330	*Prunus dulcis x Prunus persica*		Pru p 2.0101	putative allergen Pru p 2.01B [Prunus dulcis x Prunus persica]	190613911
1331	*Prunus dulcis x Prunus persica*		Pru p 2.0201	putative allergen Pru p 2.01A [Prunus dulcis x Prunus persica]	190613907
1332	*Prunus persica*	Peach	Unassigned	major allergen Pru p 1 [Prunus persica]	82492265
1333	*Prunus persica*	Peach	Unassigned	non-specific lipid transfer protein [Prunus persica]	313575718
1334	*Prunus persica*	Peach	Pru p 3	Chain B, Crystal Structure Of Peach Pru P3, The Prototypic Member Of The Family Of Plant Non-Specific Lipid Transfer Protein Pan-Allergens	83754241
1335	*Prunus persica*	Peach	Unassigned	lipid transfer protein 1 precursor [Prunus persica]	54793477
1336	*Prunus persica*	Peach	Pru p 3	Nonspecific lipid-transfer protein 1 (LTP 1) (Major allergen Pru p 3) (Pru p 1)	3287877

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1337	*Prunus persica*	Peach	Pru p 4.02	profilin [Prunus persica]	27528312
1338	*Prunus persica*	Peach	Pru p 4.01	profilin [Prunus persica]	27528310
1339	*Pseudocardium sachalinensis*		Unassigned	tropomyosin [Pseudocardium sachalinensis]	219806598
1340	*Pyrus communis*	Pear	Pyr c 1	major allergen Pyrc1 [Pyrus communis]	3044216
1341	*Pyrus communis*	Pear	Pyr c 4	profilin [Pyrus communis]	4761580
1342	*Pyrus communis*	Pear	Pyr c 5	isoflavone reductase related protein [Pyrus communis]	3243234
1343	*Quercus alba*	Oak	Unassigned	pollen allergen Que a 1 isoform [Quercus alba]	167472849
1344	*Quercus alba*	Oak	Unassigned	pollen allergen Que a 1 isoform [Quercus alba]	167472847
1345	*Quercus alba*	Oak	Que a 1	major pollen allergen Que a I - white oak (fragment)	543675
1346	*Rana esculenta*	Frog	Ran e 1	parvalbumin alpha [Rana esculenta]	20796729
1347	*Rana esculenta*	Frog	Ran e 2	parvalbumin beta protein [Rana esculenta]	20797081
1348	*Rana* sp. CH-2001	Frog	Unassigned	parvalbumin alpha [Rana sp. CH-2001]	20796733
1349	*Rana* sp. CH-2001	Frog	Unassigned	parvalbumin beta protein [Rana sp. CH-2001]	20797085
1350	*Rattus norvegicus*	Rat	Unassigned	PREDICTED: similar to Major urinary protein precursor (MUP) (Alpha-2u-globulin) (Alpha(2)-euglobulin) (Allergen Rat n 1) (Rat n I) [Rattus norvegicus]	109474987
1351	*Rattus norvegicus*	Rat	Rat n 1	Alpha-2u globulin	81890324
1352	*Rattus norvegicus*	Rat	Rat n 1	Major urinary protein precursor (MUP) (Alpha-2u-globulin) (15.5 kDa fatty acid binding protein) (15.5 kDa FABP) (Alpha(2)-euglobulin) (Allergen Rat n 1) (Rat n I)	127533
1353	*Rhodotorula mucilaginosa*	Fungus	Unassigned	Enolase (2-phosphoglycerate dehydratase) (2-phospho-D-glycerate hydro-lyase) (Allergen Rho m 1)	37078092
1354	*Rhodotorula mucilaginosa*	Fungus	Unassigned	vacuolar serine protease [Rhodotorula mucilaginosa]	54654335
1355	*Ricinus communis*	Castor bean	Ric c 1	2S albumin precursor (Allergen Ric c 1)	112762
1356	*Rubus idaeus*		Unassigned	putative allergen Rub i 1 [Rubus idaeus]	110180525
1357	*Rubus idaeus*		Unassigned	putative allergen Rub i 3 [Rubus idaeus]	110180523
1358	*Salmo salar*	Salmon	Unassigned	Parvalbumin beta 1 [Salmo salar]	209734468
1359	*Salmo salar*	Salmon	Sal s 1	Parvalbumin beta 2 (Major allergen Sal s 1)	18281421
1360	*Salmo salar*	Salmon	Sal s 1	Parvalbumin beta 1 (Major allergen Sal s 1)	2493445

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1361	*Salsola kali*	Thistle	Unassigned	Sal k 1 pollen allergen [Salsola kali]	225810597
1362	*Salsola kali*	Thistle	Unassigned	pectin methylesterase allergenic protein [Salsola kali]	59895730
1363	*Salsola kali*	Thistle	Unassigned	pectin methylesterase allergenic protein [Salsola kali]	59895728
1364	*Salsola kali*	Thistle	Unassigned	pectin-methyltransferase precursor [Salsola kali]	51242679
1365	*Salsola kali*	Thistle	Sal k 1	[Segment 4 of 4] Pollen allergen Sal k 1	25090951
1366	*Salsola kali*	Thistle	Sal k 1	[Segment 3 of 4] Pollen allergen Sal k 1	25090950
1367	*Salsola kali*	Thistle	Sal k 1	[Segment 2 of 4] Pollen allergen Sal k 1	25090949
1368	*Salsola kali*	Thistle	Sal k 1	[Segment 1 of 4] Pollen allergen Sal k 1	25090948
1369	*Salsola kali*	Thistle	Unassigned	Sal k 3 pollen allergen [Salsola kali]	225810599
1370	*Salsola kali*	Thistle	Unassigned	Sal k 4 pollen allergen [Salsola kali]	239916566
1371	*Salvelinus fontinalis*	Brook trout	Unassigned	parvalbumin [Salvelinus fontinalis]	288557440
1372	*Salvelinus fontinalis*	Brook trout	Unassigned	parvalbumin [Salvelinus fontinalis]	288557438
1373	*Sarcoptes scabiei type hominis*	Scabies mite	Unassigned	major allergen 1 [Sarcoptes scabiei type hominis]	27462848
1374	*Sarcoptes scabiei type hominis*	Scabies mite	Unassigned	Sar s 1 allergen Yv5032C08 [Sarcoptes scabiei type hominis]	46406002
1375	*Sarcoptes scabiei type hominis*	Scabies mite	Unassigned	Sar s 1 allergen SMIPP-C Yv6018B11 [Sarcoptes scabiei type hominis]	46406016
1376	*Sarcoptes scabiei type hominis*	Scabies mite	Unassigned	Sar s 1 allergen SMIPP-C Yv5009F04 [Sarcoptes scabiei type hominis]	46406014
1377	*Sarcoptes scabiei type hominis*	Scabies mite	Unassigned	Sar s 1 allergen SMIPP-C Yv4028C12 [Sarcoptes scabiei type hominis]	46406012
1378	*Sarcoptes scabiei type hominis*	Scabies mite	Unassigned	glutathione transferase mu class Yv5004H11 [Sarcoptes scabiei type hominis]	60920770
1379	*Sarcoptes scabiei type hominis*	Scabies mite	Unassigned	glutathione S-transferase [Sarcoptes scabiei type hominis]	27462836
1380	*Sardinops sagax*		Unassigned	parvalbumin [Sardinops sagax]	193247972
1381	*Scapharca broughtonii*		Unassigned	tropomyosin [Scapharca broughtonii]	219806592
1382	*Schedonorus arundinaceus*	Tall fescue	Unassigned	Group I allergen FeS e I, pollen	75139991
1383	*Schedonorus arundinaceus*	Tall fescue	Unassigned	pollen allergen Fes e I type B - reed fescue (fragment)	320611
1384	*Schedonorus arundinaceus*	Tall fescue	Unassigned	pollen allergen Fes e I type A - reed fescue (fragment)	320610

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1385	*Schistosoma japonicum*	Schistosoma	Unassigned	hypothetical protein, putative Profilin/allergen [Schistosoma japonicum]	29841461
1386	*Schistosoma japonicum*	Schistosoma	Unassigned	22.6 kDa tegumental antigen [Schistosoma japonicum]	2739154
1387	*Scomber japonicus*	Chub mackerel	Unassigned	parvalbumin [Scomber japonicus]	29420793
1388	*Scomber scombrus*	Atlantic mackerel	Unassigned	parvalbumin [Scomber scombrus]	288557436
1389	*Secale cereale*	Rye	Unassigned	pollen allergen Sec c 5 [Secale cereale]	332205751
1390	*Secale cereale*	Rye	Unassigned	30K allergen	75140047
1391	*Secale cereale*	Rye	Sec c 1	Major BAKER'S ASTHMA allergen SEC C 1	75198875
1392	*Secale cereale*	Rye	Unassigned	pollen allergen Sec c 4 [Secale cereale]	55859454
1393	*Secale cereale*	Rye	Unassigned	pollen allergen Sec c 4 [Secale cereale]	55859456
1394	*Sepia esculenta*		Unassigned	tropomyosin [Sepia esculenta]	83715928
1395	*Sepioteuthis lessoniana*		Unassigned	tropomyosin [Sepioteuthis lessoniana]	83715930
1396	*Sesamum indicum*	Sesame	Unassigned	2S albumin [Sesamum indicum]	209165427
1397	*Sesamum indicum*	Sesame	Ses i 1	2S albumin [Sesamum indicum]	13183175
1398	*Sesamum indicum*	Sesame	Ses i 2	2S albumin precursor [Sesamum indicum]	5381323
1399	*Sesamum indicum*	Sesame	Ses i 3	7S globulin [Sesamum indicum]	13183177
1400	*Sesamum indicum*	Sesame	Unassigned	15 kDa oleosin	75315271
1401	*Sesamum indicum*	Sesame	Unassigned	main allergen 15 kDa oleosin [Sesamum indicum]	198250343
1402	*Sinapis alba*	White mustard	Sin a 1	Allergen Sin a 1 precursor (Sin a I) [Contains: Allergen Sin a 1 small chain; Allergen Sin a 1 large chain]	51338758
1403	*Sinapis alba*	White mustard	Sin a 1	allergen sin a 1.0108 [Sinapis alba]	1009442
1404	*Sinapis alba*	White mustard	Sin a 1	allergen sin a 1.0107 [Sinapis alba]	1009440
1405	*Sinapis alba*	White mustard	Sin a 1	allergen sin a 1.0106 [Sinapis alba]	1009438
1406	*Sinapis alba*	White mustard	Sin a 1	allergen sin a 1.0105 [Sinapis alba]	1009436
1407	*Sinapis alba*	White mustard	Sin a 1	allergen sin a 1.0104 [Sinapis alba]	1009434
1408	*Sinapis alba*	White mustard	Unassigned	11S globulin precursor [Sinapis alba]	62240392
1409	*Sinapis alba*	White mustard	Sin a 2.0101	11S globulin precursor [Sinapis alba]	62240390
1410	*Sinapis alba*	White mustard	Sin a 3.0101	Sin a 3 allergen [Sinapis alba]	156778059

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1411	*Sinapis alba*	White mustard	Sin a 4.0101	Sin a 4 allergen [Sinapis alba]	156778061
1412	*Solanum tuberosum*	Potato	Unassigned	profilin-like protein [Solanum tuberosum]	77999277
1413	*Solanum tuberosum*	Potato	Unassigned	profilin-like [Solanum tuberosum]	77416979
1414	*Solanum tuberosum*	Potato	Sola t 1	RecName: Full=Patatin-B1; Flags: Precursor	158517845
1415	*Solanum tuberosum*	Potato	Unassigned	patatin	169500
1416	*Solanum tuberosum*	Potato	Unassigned	patatin [Solanum tuberosum]	21514
1417	*Solanum tuberosum*	Potato	Unassigned	patatin [Solanum tuberosum]	21512
1418	*Solanum tuberosum*	Potato	Unassigned	patatin B2 (AA 1 - 386) [Solanum tuberosum]	21510
1419	*Solanum tuberosum*	Potato	Sola t 2	Aspartic protease inhibitor 11 (Cathepsin D inhibitor PDI) (Allergen Sola t 2)	124148
1420	*Solanum tuberosum*	Potato	Sola t 3	Cysteine protease inhibitor 1 precursor (PCPI 8.3) (P340) (P34021)	20141344
1421	*Solanum tuberosum*	Potato	Sola t 4	Serine protease inhibitor 7 precursor (PIG) (PIGEN1) (Allergen Sola t 4) (STPIB) (STPIA) (pKEN14-28) (pF4)	20141714
1422	*Solanum tuberosum*	Potato	Unassigned	aspartic proteinase inhibitor [Solanum tuberosum]	21413
1423	*Solen strictus*		Unassigned	tropomyosin [Solen strictus]	219806602
1424	*Solenopsis geminata*	Tropical Fire Ant	Sol g 4	venom allergen Sol g 4.02 precursor [Solenopsis geminata]	7638030
1425	*Solenopsis geminata*	Tropical Fire Ant	Sol g 4	venom allergen Sol g 4.01 precursor [Solenopsis geminata]	7638028
1426	*Solenopsis invicta*	Red fire ant	Unassigned	allergen Sol i 1 precursor [Solenopsis invicta]	51093373
1427	*Solenopsis invicta*	Red fire ant	Unassigned	Sol i 1=antigen {N-terminal} [Solenopsis invicta=imported fire ants, venom, Peptide Partial, 26 aa, segment 5 of 5]	1336813
1428	*Solenopsis invicta*	Red fire ant	Unassigned	Sol i 1=antigen {N-terminal} [Solenopsis invicta=imported fire ants, venom, Peptide Partial, 26 aa, segment 4 of 5]	1336812
1429	*Solenopsis invicta*	Red fire ant	Unassigned	Sol i 1=antigen {N-terminal} [Solenopsis invicta=imported fire ants, venom, Peptide Partial, 25 aa, segment 3 of 5]	1336811
1430	*Solenopsis invicta*	Red fire ant	Unassigned	Sol i 1=antigen {N-terminal} [Solenopsis invicta=imported fire ants, venom, Peptide Partial, 58 aa, segment 1 of 5]	1336809

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1431	*Solenopsis invicta*	Red fire ant	Sol i 2	Venom allergen 2 precursor (Venom allergen II) (Allergen Sol i 2) (Sol i II)	549179
1432	*Solenopsis invicta*	Red fire ant	Sol i 3	Venom allergen III precursor (Allergen Sol i 3) (Sol i III)	14424466
1433	*Solenopsis invicta*	Red fire ant	Sol i 4	Venom allergen IV precursor (Allergen Sol i 4) (Sol i IV)	14424465
1434	*Solenopsis invicta*	Red fire ant	Sol i 4	venom allergen Sol i 4.02 precursor [Solenopsis invicta]	4038411
1435	*Solenopsis richteri*	Black fire ant	Unassigned	Venom allergen 2 (Venom allergen II) (Allergen Sol r 2) (Sol r II)	6136162
1436	*Solenopsis richteri*	Black fire ant	Unassigned	Venom allergen III (Allergen Sol r 3) (Sol r III)	6136163
1437	*Solenopsis saevissima*	Brazilian fire ant	Unassigned	Sol s 2 allergen [Solenopsis saevissima]	291092710
1438	*Staphylococcus aureus*		Unassigned	Chain B, Staphylococcal Enterotoxin A	1633233
1439	*Staphylococcus aureus*		Unassigned	staphylococcal enterotoxin B precursor (SEB) [Staphylococcus aureus]	83308249
1440	*Staphylococcus aureus*		Unassigned	RecName: Full=Enterotoxin type C-2; AltName: Full=SEC2; Flags: Precursor	462026
1441	*Staphylococcus aureus*		Unassigned	RecName: Full=Enterotoxin type D; AltName: Full=SED; Flags: Precursor	119654
1442	*Staphylococcus aureus*		Unassigned	RecName: Full=Toxic shock syndrome toxin-1; Short=TSST-1; Flags: Precursor	136457
1443	*Suidasia medanensis*		Unassigned	group 2 allergen Sui m 2 [Suidasia medanensis]	45738062
1444	*Sus scrofa*	Pig	Unassigned	RecName: Full=Pepsin A; Flags: Precursor	118572685
1445	*Syringa vulgaris*	Lilac	Syr v 1.0103	allergen-like protein Syr v I isoform 3 - Syringa vulgaris	631913
1446	*Syringa vulgaris*	Lilac	Syr v 1.0102	allergen-like protein Syr v I isoform 2 - Syringa vulgaris	631912
1447	*Syringa vulgaris*	Lilac	Syr v 1.0101	allergen-like protein Syr v I isoform 1 - Syringa vulgaris	631911
1448	*Tabanus yao*	Horse Fly	Tab y 1.0101	Tab y 3 allergen [Tabanus yao]	323473390
1449	*Tabanus yao*	Horse Fly	Tab y 2.0101	putative Tab y 2 allergen [Tabanus yao]	304273371
1450	*Tabanus yao*	Horse Fly	Tab y 5.0101	putative Tab y 1 allergen [Tabanus yao]	304273369
1451	*Thaumetopoea pityocampa*	Pine moth	Unassigned	Tha p 1 allergen [Thaumetopoea pityocampa]	301030229
1452	*Theragra chalcogramma*	Alaska pollock	Unassigned	parvalbumin [Theragra chalcogramma]	14531018

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1453	*Theragra chalcogramma*	Alaska pollock	Unassigned	parvalbumin [Theragra chalcogramma]	14531020
1454	*Todarodes pacificus*	Japanese flying squid	Unassigned	tropomyosin [Todarodes pacificus]	83715932
1455	*Trachurus japonicus*		Unassigned	dark muscle parvalbumin [Trachurus japonicus]	77799800
1456	*Tresus keenae*		Unassigned	tropomyosin [Tresus keenae]	219806600
1457	*Triatoma protracta*	Western conenose	Tria p 1	procalin [Triatoma protracta]	15426413
1458	*Trichophyton rubrum*	Fungus	Tri r 2	Tri r 2 allergen [Trichophyton rubrum]	5813790
1459	*Trichophyton rubrum*	Fungus	Tri r 4	Tri r 4 allergen [Trichophyton rubrum]	5813788
1460	*Trichophyton schoenleinii*	Fungus	Unassigned	RecName: Full=Subtilisin-like protease 6; AltName: Allergen=Tri m 2; Flags: Precursor	74663809
1461	*Trichophyton schoenleinii*	Fungus	Unassigned	tri s 4 allergen [Trichophyton schoenleinii]	23894227
1462	*Triticum aestivum*	Wheat	Unassigned	RecName: Full=Non-specific lipid-transfer protein; Short=LTP; AltName: Full=Phospholipid transfer protein; Short=PLTP; AltName: Full=ns-LTP1; Flags: Precursor	417370
1463	*Triticum aestivum*	Wheat	Unassigned	5a2 protein [Triticum aestivum]	66840998
1464	*Triticum aestivum*	Wheat	Unassigned	major allergen CM16 [Triticum aestivum]	195957140
1465	*Triticum aestivum*	Wheat	Unassigned	CM 17 protein precursor [Triticum aestivum]	21711
1466	*Triticum aestivum*	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21713
1467	*Triticum aestivum*	Wheat	Unassigned	alpha-gliadin [Triticum aestivum]	1304264
1468	*Triticum aestivum*	Wheat	Unassigned	alpha-gliadin	473876
1469	*Triticum aestivum*	Wheat	Unassigned	alpha-type gliadin	170728
1470	*Triticum aestivum*	Wheat	Unassigned	pre-alpha-/beta-gliadin A-III	170726
1471	*Triticum aestivum*	Wheat	Unassigned	pre-alpha-/beta-gliadin A-IV	170724
1472	*Triticum aestivum*	Wheat	Unassigned	pre-alpha-/beta-gliadin A-I	170722
1473	*Triticum aestivum*	Wheat	Unassigned	alpha/beta-gliadin precursor [Triticum aestivum]	170720
1474	*Triticum aestivum*	Wheat	Unassigned	alpha/beta-gliadin precursor	170718
1475	*Triticum aestivum*	Wheat	Unassigned	pre-alpha-/beta-gliadin A-II	170712
1476	*Triticum aestivum*	Wheat	Unassigned	alpha-type gliadin precursor protein	170710
1477	*Triticum aestivum*	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21765

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1478	*Triticum aestivum*	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21761
1479	*Triticum aestivum*	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21757
1480	*Triticum aestivum*	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21755
1481	*Triticum aestivum*	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21673
1482	*Triticum aestivum*	Wheat	Unassigned	Allergen C-C	3913017
1483	*Triticum aestivum*	Wheat	Unassigned	putative gamma-gliadin [Triticum aestivum]	62484809
1484	*Triticum aestivum*	Wheat	Unassigned	gamma-gliadin precursor [Triticum aestivum]	1063270
1485	*Triticum aestivum*	Wheat	Unassigned	gamma-gliadin	170738
1486	*Triticum aestivum*	Wheat	Unassigned	gamma-gliadin	170736
1487	*Triticum aestivum*	Wheat	Unassigned	gamma gliadin B-III	170734
1488	*Triticum aestivum*	Wheat	Unassigned	gamma-gliadin	170732
1489	*Triticum aestivum*	Wheat	Unassigned	pre-gamma-gliadin B-I	170730
1490	*Triticum aestivum*	Wheat	Unassigned	gamma-gliadin B precursor	170708
1491	*Triticum aestivum*	Wheat	Unassigned	gamma gliadin precursor	170702
1492	*Triticum aestivum*	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	897811
1493	*Triticum aestivum*	Wheat	Unassigned	glutenin [Triticum aestivum]	736319
1494	*Triticum aestivum*	Wheat	Unassigned	HMW glutenin subunit Ax2* [Triticum aestivum]	170743
1495	*Triticum aestivum*	Wheat	Unassigned	HMW glutenin subunit 1By9 [Triticum aestivum]	22090
1496	*Triticum aestivum*	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21793
1497	*Triticum aestivum*	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21779
1498	*Triticum aestivum*	Wheat	Unassigned	high molecular weight glutenin subunit 10 [Triticum aestivum]	21751
1499	*Triticum aestivum*	Wheat	Unassigned	high molecular weight glutenin subunit 1Ax1 [Triticum aestivum]	21743
1500	*Triticum aestivum*	Wheat	Unassigned	low molecular weight glutenin [Triticum aestivum]	335331566
1501	*Triticum aestivum*	Wheat	Unassigned	LMM glutenin 1	75219081
1502	*Triticum aestivum*	Wheat	Unassigned	LMM glutenin 3	75317968

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1503	*Triticum aestivum*	Wheat	Unassigned	putative LMW-glutenin subunit [Triticum aestivum]	62550933
1504	*Triticum aestivum*	Wheat	Unassigned	low molecular weight glutenin [Triticum aestivum]	886967
1505	*Triticum aestivum*	Wheat	Unassigned	low molecular weight glutenin [Triticum aestivum]	886965
1506	*Triticum aestivum*	Wheat	Unassigned	low molecular weight glutenin [Triticum aestivum]	886963
1507	*Triticum aestivum*	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21783
1508	*Triticum aestivum*	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21773
1509	*Triticum aestivum*	Wheat	Unassigned	D-type LMW glutenin subunit [Triticum aestivum]	208605348
1510	*Triticum aestivum*	Wheat	Unassigned	D-type LMW glutenin subunit [Triticum aestivum]	208605346
1511	*Triticum aestivum*	Wheat	Unassigned	D-type LMW glutenin subunit [Triticum aestivum]	208605344
1512	*Triticum aestivum*	Wheat	Unassigned	omega-5 gliadin [Triticum aestivum]	73912496
1513	*Triticum aestivum*	Wheat	Unassigned	profilin [Triticum aestivum]	190684061
1514	*Triticum aestivum*	Wheat	Unassigned	profilin [Triticum aestivum]	1052817
1515	*Triticum aestivum*	Wheat	Unassigned	profilin [Triticum aestivum]	1008445
1516	*Triticum aestivum*	Wheat	Unassigned	profilin [Triticum aestivum]	1008443
1517	*Triticum aestivum*	Wheat	Unassigned	dehydrin [Triticum aestivum]	190684063
1518	*Triticum aestivum*	Wheat	Unassigned	peroxiredoxin [Triticum aestivum]	190684059
1519	*Triticum aestivum*	Wheat	Unassigned	glutathione transferase [Triticum aestivum]	190684057
1520	*Triticum aestivum*	Wheat	Unassigned	thioredoxin H [Triticum aestivum]	190684055
1521	*Triticum aestivum*	Wheat	Unassigned	putative leucine-rich repeat protein [Triticum aestivum]	66840996
1522	*Triticum aestivum*	Wheat	Unassigned	RecName: Full=Serine carboxypeptidase 2; AltName: Full=Serine carboxypeptidase II; AltName: Full=Carboxypeptidase D; AltName: Full=CPDW-II; Short=CP-WII; Contains: RecName: Full=Serine carboxypeptidase 2 chain A; AltName: Full=Serine carboxypeptidase II c	125987805
1523	*Triticum aestivum*	Wheat	Unassigned	serine carboxypeptidase II [Triticum aestivum]	66840994
1524	*Triticum aestivum*	Wheat	Unassigned	serpin [Triticum aestivum]	1885350

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1525	*Triticum aestivum*	Wheat	Unassigned	RecName: Full=Subtilisin-chymotrypsin inhibitor WSCI; Flags: Precursor	122065237
1526	*Triticum aestivum*	Wheat	Unassigned	serine proteinase inhibitor-like allergen [Triticum aestivum]	154101366
1527	*Triticum aestivum*	Wheat	Unassigned	RecName: Full=Thaumatin-like protein PWIR2; Flags: Precursor	135917
1528	*Triticum aestivum*	Wheat	Unassigned	putative alpha-amylase inhibitor CM2 [Triticum aestivum]	283465827
1529	*Triticum aestivum*	Wheat	Unassigned	alpha amylase inhibitor CM1 [Triticum aestivum]	253783731
1530	*Triticum aestivum*	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21701
1531	*Triticum aestivum*	Wheat	Unassigned	triosephosphat-isomerase [Triticum aestivum]	11124572
1532	*Triticum turgidum*	Wheat	Unassigned	tetrameric alpha-amylase inhibitor 16 kDa subunit, CM16* [Triticum turgidum L.=pasta wheat, cv. Senatore Capelli, Peptide Partial, 18 aa]	244610
1533	*Triticum turgidum subsp. durum*	Wheat	Unassigned	precursor (AA -24 to 119) [Triticum turgidum subsp. durum]	21916
1534	*Triticum turgidum subsp. durum*	Wheat	Unassigned	alpha-amylase inhibitor, tetrameric, chain CM3 precursor - durum wheat	100834
1535	*Triticum turgidum subsp. durum*	Wheat	Unassigned	LMW glutenin [Triticum turgidum subsp. durum]	21930
1536	*Triticum turgidum subsp. durum*	Wheat	Unassigned	unnamed protein product [Triticum turgidum subsp. durum]	21926
1537	*Triticum turgidum subsp. durum*	Wheat	Unassigned	CM2 protein [Triticum turgidum subsp. durum]	21920
1538	*Triticum urartu*	Wheat	Unassigned	gliadin	170740
1539	*Tyrophagus putrescentiae*	Dust mite	Unassigned	tropomyosin [Tyrophagus putrescentiae]	48249227
1540	*Tyrophagus putrescentiae*	Dust mite	Unassigned	tropomyosin [Tyrophagus putrescentiae]	156938915
1541	*Tyrophagus putrescentiae*	Dust mite	Unassigned	tropomyosin [Tyrophagus putrescentiae]	148615631
1542	*Tyrophagus putrescentiae*	Dust mite	Unassigned	allergen Tyr p 13 [Tyrophagus putrescentiae]	156938917
1543	*Tyrophagus putrescentiae*	Dust mite	Unassigned	mite allergen Tyr p 13 [Tyrophagus putrescentiae]	121296500
1544	*Tyrophagus putrescentiae*	Dust mite	Tyr p 13	fatty acid-biding protein [Tyrophagus putrescentiae]	51860756

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1545	*Tyrophagus putrescentiae*	Dust mite	Unassigned	Mite group 2 allergen Tyr p 2 precursor	3182907
1546	*Tyrophagus putrescentiae*	Dust mite	Unassigned	troponin C [Tyrophagus putrescentiae]	219815476
1547	*Tyrophagus putrescentiae*	Dust mite	Unassigned	Tyr p 3 [Tyrophagus putrescentiae]	167540622
1548	*Vespa crabro*	European hornet	Vesp c 5	Venom allergen 5.01 (Antigen 5-1) (Ag5-1) (Allergen Vesp c 5.01) (Vesp c V.01)	549184
1549	*Vespa crabro*	European hornet	Vesp c 5	Venom allergen 5.02 (Antigen 5-2) (Ag5-2) (Allergen Vesp c 5.02) (Vesp c V.02)	549185
1550	*Vespa crabro*	European hornet	Unassigned	RecName: Full=Venom phospholipase A1; AltName: Allergen=Vesp c 1	313471397
1551	*Vespa mandarinia*	Wasp	Vesp m 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Vesp m 5)	6136165
1552	*Vespula flavopilosa*	Wasp	Ves f 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Ves f 5) (Ves f V)	549189
1553	*Vespula germanica*	Wasp	Unassigned	Ves g 1 allergen precursor [Vespula germanica]	74035843
1554	*Vespula germanica*	Wasp	Unassigned	Ves g 5 allergen precursor [Vespula germanica]	74035841
1555	*Vespula germanica*	Wasp	Ves g 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Ves g 5) (Ves g V)	549190
1556	*Vespula germanica*	Wasp	Unassigned	hyaluronidase homologue [Vespula germanica]	116174182
1557	*Vespula germanica*	Wasp	Unassigned	hyaluronidase [Vespula germanica]	116174180
1558	*Vespula maculifrons*	Wasp	Ves m 1	Phospholipase A1 (Allergen Ves m 1) (Ves m I)	1709545
1559	*Vespula maculifrons*	Wasp	Unassigned	venom allergen 5 [Vespula maculifrons]	85681830
1560	*Vespula maculifrons*	Wasp	Ves m 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Ves m 5) (Ves m V)	549191
1561	*Vespula maculifrons*	Wasp	Unassigned	RecName: Full=Hyaluronidase; Short=Hya; AltName: Full=Hyaluronoglucosaminidase; AltName: Allergen=Ves m 2	313118253
1562	*Vespula pensylvanica*	Wasp	Ves p 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Ves p 5) (Ves p V)	549192
1563	*Vespula squamosa*	Wasp	Ves s 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Ves s 5) (Ves s V)	549193

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1564	*Vespula squamosa*	Wasp	Unassigned	RecName: Full=Venom phospholipase A1; AltName: Allergen=Ves s 1	313471398
1565	*Vespula vidua*	Wasp	Ves vi 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Ves vi 5) (Ves vi V)	549194
1566	*Vespula vulgaris*	Wasp	Ves v 1	allergen and phospholipase A1	897647
1567	*Vespula vulgaris*	Wasp	Ves v 5	Chain A, Ves V 5, An Allergen From Vespula Vulgaris Venom	11514279
1568	*Vespula vulgaris*	Wasp	Ves v 5	allergen 5; antigen 5 [Vespula vulgaris]	4826574
1569	*Vespula vulgaris*	Wasp	Ves v 5	allergen 5	162551
1570	*Vespula vulgaris*	Wasp	Unassigned	Chain A, Crystal Structure Of The Recombinant Allergen Ves V 2	109157163
1571	*Vespula vulgaris*	Wasp	Unassigned	hyaluronidase b [Vespula vulgaris]	62147665
1572	*Vespula vulgaris*	Wasp	Ves v 2	Hyaluronoglucosaminidase (Hyaluronidase) (Allergen Ves v 2) (Ves v II)	1346323
1573	*Vespula vulgaris*	Wasp	Unassigned	RecName: Full=Venom dipeptidyl peptidase 4; AltName: Full=Venom dipeptidyl peptidase IV; AltName: Allergen=Ves v 3; Flags: Precursor	313471718
1574	*Vigna radiata*		Unassigned	pathogenesis-related protein 10 [Vigna radiata]	60418924
1575	*Vitis sp.*	Grape	Unassigned	Nonspecific lipid-transfer protein P3 (LTP P3)	145559502
1576	*Vitis sp.*	Grape	Unassigned	Nonspecific lipid-transfer protein P2 (LTP P2)	462717
1577	*Vitis sp.*	Grape	Vit v 1	Nonspecific lipid-transfer protein P4 (LTP P4)	462719
1578	*Xiphias gladius*		Unassigned	beta-parvalbumin [Xiphias gladius]	222352960
1579	*Zea mays*	Corn	Unassigned	Expansin-B11 precursor (ZmEXPB11) (Beta-expansin-11) (Pollen allergen Zea m 1a) (Pollen allergen Zea m 1b)	115502168
1580	*Zea mays*	Corn	Unassigned	Expansin-B10 precursor (ZmEXPB10) (Beta-expansin-10) (Pollen allergen Zea m 1c)	115502167
1581	*Zea mays*	Corn	Unassigned	EXPB10 [Zea mays]	105969545
1582	*Zea mays*	Corn	Unassigned	EXPB10 [Zea mays]	105969543
1583	*Zea mays*	Corn	Unassigned	Zea m 1 allergen [Zea mays]	89892723

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1584	*Zea mays*	Corn	Unassigned	Zea m 1 allergen [Zea mays]	89892721
1585	*Zea mays*	Corn	Unassigned	pollen profilin variant 7 [Zea mays]	110644964
1586	*Zea mays*	Corn	Unassigned	pollen profilin variant 6 [Zea mays]	110644962
1587	*Zea mays*	Corn	Unassigned	pollen profilin variant 5 [Zea mays]	110644960
1588	*Zea mays*	Corn	Unassigned	pollen profilin variant 4 [Zea mays]	110644958
1589	*Zea mays*	Corn	Unassigned	pollen profilin variant 3 [Zea mays]	110644956
1590	*Zea mays*	Corn	Unassigned	pollen profilin variant 2 [Zea mays]	110644954
1591	*Zea mays*	Corn	Unassigned	pollen profilin variant 1 [Zea mays]	110644952
1592	*Zea mays*	Corn	Unassigned	profilin [Zea mays]	2642324
1593	*Zea mays*	Corn	Unassigned	Zea m 13 allergen [Zea mays]	89892729
1594	*Zea mays*	Corn	Unassigned	Zea m 13 allergen [Zea mays]	89892727
1595	*Zea mays*	Corn	Unassigned	Zea m 13 allergen [Zea mays]	89892725
1596	*Zea mays*	Corn	Unassigned	Zm13	1588669
1597	*Zea mays*	Corn	Zea m 14	Nonspecific lipid-transfer protein precursor (LTP) (Phospholipid transfer protein) (PLTP) (Allergen Zea m 14)	128388
1598	*Zea mays*	Corn	Unassigned	thioredoxin h1 protein [Zea mays]	66841002
1599	*Zea mays*	Corn	Unassigned	Chain X, Crystal Structure Of Expb1 (Zea M 1), A Beta-Expansin And Group-1 Pollen Allergen From Maize	114794319
1600	*Zea mays*	Corn	Unassigned	beta-expansin 1 [Zea mays]	14193761
1601	*Zea mays*	Corn	Unassigned	beta-expansin 1 protein [Zea mays]	28630923
1602	*Zea mays*	Corn	Unassigned	beta-expansin 9 protein [Zea mays]	28630919
1603	*Ziziphus mauritiana*	Chinese-date	Unassigned	allergen Ziz m 1 [Ziziphus mauritiana]	61225281

APPENDIX B FASTA Search Alignments

Hit Name	*E*-value	Percent Identity	Hit Length (aa)
>>ALLERGEN_2012_2|gi|46410859|gb|AAR98518.1| major latex (366 aa)	1.1	22.881	236
>>ALLERGEN_2012_2|gi|2266625|emb|CAB10765.1| group V all (264 aa)	2.7	34.286	70
>>ALLERGEN_2012_2|gi|1092249|prf||2023228A major allerge (285 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|2398757|emb|CAA50281.1| Major Polle (286 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|21725630|emb|CAD38396.1| unnamed pr (287 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|21725612|emb|CAD38387.1| unnamed pr (287 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|21725614|emb|CAD38388.1| unnamed pr (287 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|21725616|emb|CAD38389.1| unnamed pr (287 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|21725618|emb|CAD38390.1| unnamed pr (287 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|21725620|emb|CAD38391.1| unnamed pr (287 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|21725622|emb|CAD38392.1| unnamed pr (287 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|21725624|emb|CAD38393.1| unnamed pr (287 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|21725626|emb|CAD38394.1| unnamed pr (287 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|21725632|emb|CAD38397.1| unnamed pr (287 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|21725606|emb|CAD38384.1| unnamed pr (287 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|21725610|emb|CAD38386.1| unnamed pr (287 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|21725608|emb|CAD38385.1| unnamed pr (287 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|21725628|emb|CAD38395.1| unnamed pr (287 aa)	5.2	28.713	101
>>ALLERGEN_2012_2|gi|3309039|gb|AAC25994.1| group V alle (312 aa)	5.5	28.713	101
>>ALLERGEN_2012_2|gi|398830|emb|CAA52753.1| Phlp5 [Phleu (312 aa)	5.5	27.273	110
>>ALLERGEN_2012_2|gi|13430402|gb|AAK25823.1| group V all (275 aa)	6.9	25.301	166
>>ALLERGEN_2012_2|gi|29500897|emb|CAD87529.1| phl p5a al (284 aa)	8.2	32	75

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>>ALLERGEN_2012_2|gi|46410859|gb|AAR98518.1| major latex  (366 aa)
 initn:  40 init1:  40 opt:  87  Z-score: 102.2  bits: 27.8 E():  1.1
Smith-Waterman score: 117;  22.881% identity (26.087% ungapped) in 236 aa
overlap (175-404:37-249)

          150       160       170       180       190       200
AvHPPD EAFRVSVAGGARPAFAPADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSP
                                        ::     .:. :::.    .::....   :
ALLERG SLFILSLFTFTLLNPVCTELDEYLFSFGDGLYDAGNAKFI-YPDK----YLPSYHH---P
         10        20        30        40         50

          210       220       230       240       250       260
AvHPPD GAVDYGLTRFDHVVGNVPEMAPVIDYMKGFLGFHEFAEFTAEDVGTTESGLNSVVLANNS
           :: : ::. .:   .   :.:..   ... ..  :  .... :  : : .     :
ALLERG ----YGTTFFDYPTGRFSDGRTVVDFVAENVSLPRIPPFKNKEANFTY-GANFA-----S
           60        70        80        90       100

          270       280       290       300       310       320
AvHPPD EAVLLPLNEPVHGTKRRSQIQTYLEYHGGPGVQHIALASNDVLRTLREMRARTPMGGFEF
       :..    ..:.     ::::. . : .   .:: . ..  .. : :..      .:. ..
ALLERG EGATASDSNPL--IDFRSQIRDFGELKLEWAVQLVNVT--ELARRLKKAVYLISFGADDY
      110         120       130       140         150       160

            330       340         350         360       370
AvHPPD MA--PPQAKYYEGVRRIAGDVLSE--EQIKECQELGV--LVDRDDQGVLLQIFTKPVGDR
       .    :.    : .. :.  ::..  ..:::  ..:.  .: ..   . :  : : ..:
ALLERG LNYEIPSEASREQLESIVDVVLGNISDRIKELYDFGARKFVVENVAPLGLIPFIKQTSDN
          170       180       190       200       210       220

      380       390       400       410       420       430
AvHPPD PTFFLEMIQRIGCMEKDEVGQEYQKGGCGGFGKGNFSELFKSIEDYEKSLEVKQSVVAQK
        :.: :. . .  :.  .. .. : :
ALLERG STLFYELAS-LHAMKLPQILEKIQDGYLFPEFNYTVFNYFGIIKEIIDAPGEHGFKYGDI
          230        240       250       260       270       280

>>ALLERGEN_2012_2|gi|2266625|emb|CAB10765.1| group V all  (264 aa)
 initn:  68 init1:  68 opt:  80  Z-score: 95.4  bits: 26.1 E():  2.7
Smith-Waterman score: 80;  34.286% identity (35.821% ungapped) in 70 aa
overlap (95-162:57-125)

           70        80        90       100       110       120
AvHPPD GAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAPPPQEAATAATASIPSFSADAART
                                        :::        ::: : . ::...: .  .
ALLERG LEDVNAGFKTAVAAAANVPPADKYKTFEAAFTASSKASIAAAATKAPGLIPQLNAATNTA
         30        40        50        60        70        80

          130        140       150        160       170       180
AvHPPD FAAAHGLAVRS-VGVRVADAAEAFRVSVAGGAR-PAFAPADLGHGFGLAEVELYGDVVLR
       .:::.: . ..   . :.  .::.:: .::. .  :  ::
ALLERG YAAAQGATPEAKYDAFVTTLTEALRV-IAGALEVHAVKPATEEVGAAKIPAGELQIVDKI
         90       100       110        120       130       140

            190       200       210       220       230       240
AvHPPD FVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNVPEMAPVIDYMKGFLGFHEFAE

ALLERG DAAFRIAATAANAAPVNDKFTVFEGAFNKAIKESTGGAYEAYKFIPSLETAVKQAYAATV
         150       160       170       180       190       200
```

```
>>ALLERGEN_2012_2|gi|1092249|prf||2023228A major allerge  (285 aa)
 initn: 122 init1:  57 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 77;  28.713% identity (31.522% ungapped) in 101 aa
overlap (72-172:1-92)

              50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                      .::. : .. :.      : ..  ..: ::
ALLERG                                ADLGYGPATPAA-----PAAGYTPATPAAP
                                               10             20

             110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          .::  ::.   ..       : ::  ::  ..::. ::  ..: .. . ..  :::
ALLERG AGADAAGKATTEEQKLIEKINAGFKAA--LA--GAGVQPADKYRTFVATFGPASNKAFAE
          30        40        50            60        70        80

             170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATLSEALRIIAGTL
              90       100       110       120       130       140

>>ALLERGEN_2012_2|gi|2398757|emb|CAA50281.1| Major Polle  (286 aa)
 initn: 111 init1:  57 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 77;  28.713% identity (31.522% ungapped) in 101 aa
overlap (72-172:1-92)

              50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                      .::. : .. :.      : ..  ..: ::
ALLERG                                ADLGYGPATPAA-----PAAGYTPATPAAP
                                               10             20

             110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          .::  ::.   ..       : ::  ::  ..::. ::  ..: .. . ..  :::
ALLERG AGADAAGKATTEEQKLIEKINAGFKAA--LA--GAGVQPADKYRTFVATFGPASNKAFAE
          30        40        50            60        70        80

             170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATLSEALRIIAGTL
              90       100       110       120       130       140

>>ALLERGEN_2012_2|gi|21725630|emb|CAD38396.1| unnamed pr  (287 aa)
 initn:  52 init1:  52 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 76;  28.713% identity (31.183% ungapped) in 101 aa
overlap (72-172:1-93)

              50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                      .::. : .. :.      : ..  ..: ::
ALLERG                                ADLGYGPATPAA-----PAAGYTPATPAAP
                                               10             20
```

```
             110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          : :  ::.   ..       : ::  ::. ..::  ::  ..: .. ....  :::
ALLERG AGAEPAGKATTEEQKLIEKKNAGFKAA--LAA-AAGVPPADKYRTFVATFGAASNKAFAE
          30        40        50           60        70        80

             170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSSALRIIAGTL
             90       100       110       120       130       140

>>ALLERGEN_2012_2|gi|21725612|emb|CAD38387.1| unnamed pr  (287 aa)
 initn:  52 init1:  52 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 76;  28.713% identity (31.183% ungapped) in 101 aa
overlap (72-172:1-93)

              50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                     .::. : .. :.      : ..  ..: ::
ALLERG                               ADLGYGPATPAA-----PAAGYTPATPAAP
                                             10             20

             110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          : :  ::.   ..       : ::  ::. ..::  ::  ..: .. ....  :::
ALLERG AGAEPAGKATTEEQKLIEKKNAGFKAA--LAA-AAGVPPADKYRTFVATFGAASNKAFAE
          30        40        50           60        70        80

             170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSEALRKIAGTL
             90       100       110       120       130       140

>>ALLERGEN_2012_2|gi|21725614|emb|CAD38388.1| unnamed pr  (287 aa)
 initn:  52 init1:  52 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 76;  28.713% identity (31.183% ungapped) in 101 aa
overlap (72-172:1-93)

              50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                     .::. : .. :.      : ..  ..: ::
ALLERG                               ADLGYGPATPAA-----PAAGYTPATPAAP
                                             10             20

             110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          : :  ::.   ..       : ::  ::. ..::  ::  ..: .. ....  :::
ALLERG AGAEPAGKATTEEQKLIEKKNAGFKAA--LAA-AAGVPPADKYRTFVATFGAASNKAFAE
          30        40        50           60        70        80

             170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSSALRIIAGTL
```

```
             90        100       110       120       130       140

>>ALLERGEN_2012_2|gi|21725616|emb|CAD38389.1| unnamed pr  (287 aa)
 initn:  52 init1:  52 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 76;  28.713% identity (31.183% ungapped) in 101 aa
overlap (72-172:1-93)

              50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                      .::. : .. :.      : ..  ..: ::
ALLERG                                ADLGYGPATPAA-----PAAGYTPATPAAP
                                              10             20

             110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          : :  ::.   ..       : ::  ::. ..::  ::  ..: .. ....  :::
ALLERG AGAEPAGKATTEEQKLIEKKNAGFKAA--LAA-AAGVPPADKYRTFVATFGAASNKAFAE
          30        40        50            60        70        80

             170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSSALRIIAGTL
             90        100       110       120       130       140

>>ALLERGEN_2012_2|gi|21725618|emb|CAD38390.1| unnamed pr  (287 aa)
 initn:  52 init1:  52 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 76;  28.713% identity (31.183% ungapped) in 101 aa
overlap (72-172:1-93)

              50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                      .::. : .. :.      : ..  ..: ::
ALLERG                                ADLGYGPATPAA-----PAAGYTPATPAAP
                                              10             20

             110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          : :  ::.   ..       : ::  ::. ..::  ::  ..: .. ....  :::
ALLERG AGAEPAGKATTEEQKLIEKKNAGFKAA--LAA-AAGVPPADKYRTFVATFGAASNKAFAE
          30        40        50            60        70        80

             170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSSALRIIAGTL
             90        100       110       120       130       140

>>ALLERGEN_2012_2|gi|21725620|emb|CAD38391.1| unnamed pr  (287 aa)
 initn:  52 init1:  52 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 76;  28.713% identity (31.183% ungapped) in 101 aa
overlap (72-172:1-93)

              50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                      .::. : .. :.      : ..  ..: ::
ALLERG                                ADLGYGPATPAA-----PAAGYTPATPAAP
```

```
                                                 10             20

             110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          : :  ::.   ..       : ::  ::. ..::  ::  ..: .. ....  :::
ALLERG AGAEPAGKATTEEQKLIEKKNAGFKAA--LAA-AAGVPPADKYRTFVATFGAASNKAFAE
          30        40        50           60        70        80

             170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSSALRIIAGTL
             90       100       110       120       130       140

>>ALLERGEN_2012_2|gi|21725622|emb|CAD38392.1| unnamed pr  (287 aa)
 initn:  52 init1:  52 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 76;  28.713% identity (31.183% ungapped) in 101 aa
overlap (72-172:1-93)

              50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                     .::. : .. :.      : ..  ..: ::
ALLERG                               ADLGYGPATPAA-----PAAGYTPATPAAP
                                                 10             20

             110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          : :  ::.   ..       : ::  ::. ..::  ::  ..: .. ....  :::
ALLERG AGAEPAGKATTEEQKLIEKINAGFKAA--LAA-AAGVPPADKYNTFVATFGAASNKAFAE
          30        40        50           60        70        80

             170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSEALSIIAGTL
             90       100       110       120       130       140

>>ALLERGEN_2012_2|gi|21725624|emb|CAD38393.1| unnamed pr  (287 aa)
 initn:  52 init1:  52 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 76;  28.713% identity (31.183% ungapped) in 101 aa
overlap (72-172:1-93)

              50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                     .::. : .. :.      : ..  ..: ::
ALLERG                               ADLGYGPATPAA-----PAAGYTPATPAAP
                                                 10             20

             110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          : :  ::.   ..       : ::  ::. ..::  ::  ..: .. ....  :::
ALLERG AGAEPAGKATTEEQKLIEKINAGFKAA--LAA-AAGVPPADKYNTFVATFGAASNKAFAE
          30        40        50           60        70        80

             170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
```

```
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSEALRKIAGTL
             90       100       110       120       130       140

>>ALLERGEN_2012_2|gi|21725626|emb|CAD38394.1| unnamed pr  (287 aa)
 initn:  52 init1:  52 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 76;  28.713% identity (31.183% ungapped) in 101 aa
overlap (72-172:1-93)

              50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                     .::. : .. :.      : ..  ..: ::
ALLERG                               ADLGYGPATPAA-----PAAGYTPATPAAP
                                             10             20

             110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          : :  ::.   ..       : ::  ::. ..::  ::  ..: .. ....  :::
ALLERG AGAEPAGKATTEEQKLIEKKNAGFKAA--LAA-AAGVPPADKYRTFVATFGAASNKAFAE
          30        40        50           60        70        80

             170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSSALRIIAGTL
             90       100       110       120       130       140

>>ALLERGEN_2012_2|gi|21725632|emb|CAD38397.1| unnamed pr  (287 aa)
 initn:  52 init1:  52 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 76;  28.713% identity (31.183% ungapped) in 101 aa
overlap (72-172:1-93)

              50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                     .::. : .. :.      : ..  ..: ::
ALLERG                               ADLGYGPATPAA-----PAAGYTPATPAAP
                                             10             20

             110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          : :  ::.   ..       : ::  ::. ..::  ::  ..: .. ....  :::
ALLERG AGAEPAGKATTEEQKLIEKKNAGFKAA--LAA-AAGVPPADKYRTFVATFGAASNKAFAE
          30        40        50           60        70        80

             170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSSALRIIAGTL
             90       100       110       120       130       140

>>ALLERGEN_2012_2|gi|21725606|emb|CAD38384.1| unnamed pr  (287 aa)
 initn:  52 init1:  52 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 76;  28.713% identity (31.183% ungapped) in 101 aa
overlap (72-172:1-93)

              50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                     .::. : .. :.      : ..  ..: ::
```

```
ALLERG                                ADLGYGPATPAA-----PAAGYTPATPAAP
                                              10             20

            110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          : :  ::.   ..       : ::  ::. ..::  ::  ..: .. ....  :::
ALLERG AGAEPAGKATTEEQKLIEKKNAGFKAA--LAA-AAGVPPADKYRTFVATFGAASNKAFAE
          30        40        50           60        70        80

            170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSSALRIIAGTL
            90       100       110       120       130       140

>>ALLERGEN_2012_2|gi|21725610|emb|CAD38386.1| unnamed pr  (287 aa)
 initn:  52 init1:  52 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 76;  28.713% identity (31.183% ungapped) in 101 aa
overlap (72-172:1-93)

             50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                      .::. : .. :.      : ..  ..: ::
ALLERG                                ADLGYGPATPAA-----PAAGYTPATPAAP
                                              10             20

            110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          : :  ::.   ..       : ::  ::. ..::  ::  ..: .. ....  :::
ALLERG AGAEPAGKATTEEQKLIEKKNAGFKAA--LAA-AAGVPPADKYRTFVATFGAASNKAFAE
          30        40        50           60        70        80

            170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSEALSIIAGTL
            90       100       110       120       130       140

>>ALLERGEN_2012_2|gi|21725608|emb|CAD38385.1| unnamed pr  (287 aa)
 initn:  52 init1:  52 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 76;  28.713% identity (31.183% ungapped) in 101 aa
overlap (72-172:1-93)

             50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                      .::. : .. :.      : ..  ..: ::
ALLERG                                ADLGYGPATPAA-----PAAGYTPATPAAP
                                              10             20

            110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          : :  ::.   ..       : ::  ::. ..::  ::  ..: .. ....  :::
ALLERG AGAEPAGKATTEEQKLIEKINAGFKAA--LAA-AAGVPPADKYNTFVATFGAASNKAFAE
          30        40        50           60        70        80

            170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
```

```
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSSALRIIAGTL
             90       100       110       120       130       140

>>ALLERGEN_2012_2|gi|21725628|emb|CAD38395.1| unnamed pr  (287 aa)
 initn:  52 init1:  52 opt:  76  Z-score: 90.2  bits: 25.2 E():  5.2
Smith-Waterman score: 76;  28.713% identity (31.183% ungapped) in 101 aa
overlap (72-172:1-93)

              50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                     .::. : .. :.      : ..  ..: ::
ALLERG                               ADLGYGPATPAA-----PAAGYTPATPAAP
                                             10             20

             110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          : :  ::.   ..       : ::  ::. ..::  ::  ..: .. ....  :::
ALLERG AGAEPAGKATTEEQKLIEKKNAGFKAA--LAA-AAGVPPADKYRTFVATFGAASNKAFAE
          30        40        50           60        70        80

             170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSSALRIIAGTL
             90       100       110       120       130       140

>>ALLERGEN_2012_2|gi|3309039|gb|AAC25994.1| group V alle  (312 aa)
 initn:  52 init1:  52 opt:  76  Z-score: 89.8  bits: 25.3 E():  5.5
Smith-Waterman score: 76;  28.713% identity (31.183% ungapped) in 101 aa
overlap (72-172:26-118)

              50        60        70        80        90       100
AvHPPD SFHHVELWCADAASAAGRFSFALGAPLAARSDLSTGNSAHASLLLRSGALAFLFTAPYAP
                                     .::. : .. :.      : ..  ..: ::
ALLERG      MAVHQYTVALFLAVALVAGPAGSYAADLGYGPATPAA-----PAAGYTPATPAAP
                    10        20        30             40        50

             110       120       130       140       150       160
AvHPPD PPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAP
          : :  ::.   ..       : ::  ::. ..::  ::  ..: .. ....  :::
ALLERG AGAEPAGKATTEEQKLIEKINAGFKAA--LAA-AAGVPPADKYRTFVATFGAASNKAFAE
               60        70          80         90       100

             170       180       190       200       210       220
AvHPPD ADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNV
       .  :.  : ::
ALLERG GLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSEALRIIAGTL
       110       120       130       140       150       160

>>ALLERGEN_2012_2|gi|398830|emb|CAA52753.1| Phlp5 [Phleu  (312 aa)
 initn:  97 init1:  56 opt:  76  Z-score: 89.8  bits: 25.3 E():  5.5
Smith-Waterman score: 76;  27.273% identity (29.703% ungapped) in 110 aa
overlap (64-172:17-118)

            40        50        60        70         80        90
AvHPPD RSDRFPVLSFHHVELWCADAASAAGRFSFALGAPLAARS-DLSTGNSAHASLLLRSGALA
```

```
                                        ...: :. . ::. : .. :.      : .
ALLERG                MAVHQYTVALFLAVALVAGPAASYAADLGYGPATPAA-----PAAG
                                10        20        30             40

            100       110       120       130       140       150
AvHPPD FLFTAPYAPPPQEAATAATASIPSFSADAARTFAAAHGLAVRSVGVRVADAAEAFRVSVA
       .  ..: ::     :  ::.   ..       : ::  ::. ..::. ::  ..: .. .
ALLERG YTPATPAAPAEAAPAGKATTEEQKLIEKINAGFKAA--LAA-AAGVQPADKYRTFVATFG
              50        60        70          80         90

            160       170       180       190       200       210
AvHPPD GGARPAFAPADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLT
       ...  ::: .  :.  : ::
ALLERG AASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATLSE
      100       110       120       130       140       150

>>ALLERGEN_2012_2|gi|13430402|gb|AAK25823.1| group V all  (275 aa)
 initn:  70 init1:  70 opt:  74  Z-score: 88.0  bits: 24.7 E():  6.9
Smith-Waterman score: 77;  25.301% identity (28.966% ungapped) in 166 aa
overlap (2-158:19-172)

                                  10        20         30        40
AvHPPD                   MPPTPATATGAAAAAVTPEHAARSF-PRVVRVNPRSDRFPVLS
                          :: :    ::.   . :   :::  : .:   : .:..
ALLERG PISVTAPPPQLPRPPATPPPPPPPQLGASPYKLGPSPKARSERPAIV---PPADKY----
               10        20        30        40           50

             50        60        70         80        90       100
AvHPPD FHHVELWCADAASAAGRFSFALGAPLAARSDL-STGNSAHASLLLRSGALAFLFTAPYAP
           . . :  ..:... .:: :     ..   :....: .: :  .  ::.  .   .:
ALLERG ----RTFVATFGAASNK-AFAEGLSGEPKGGAESSSKAALTSKLDAAYKLAYKTAEGATP
                60         70        80        90       100

             110           120       130        140        150
AvHPPD PPQEAATAATAS----IPSFSADAARTFAAAHGLAVRSVG-VRVADAAEA-FRVSV-AGG
         .  : .:: :    : . . ..  .  ::. . :  .: ..: . ..: :.:.. :..
ALLERG EAKYDAYVATLSEALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAAN
      110       120       130       140       150       160

          160       170       180       190       200       210
AvHPPD ARPAFAPADLGHGFGLAEVELYGDVVLRFVSYPDETDLPFLPGFERVSSPGAVDYGLTRF
        : ::
ALLERG AAPANDKFTVFEAAFNNAIKAGTGGAYESYKFIPALEAAVKQAYAATVATAPEVKYTVFE
      170       180       190       200       210       220

>>ALLERGEN_2012_2|gi|29500897|emb|CAD87529.1| phl p5a al  (284 aa)
 initn:  52 init1:  52 opt:  73  Z-score: 86.7  bits: 24.5 E():  8.2
Smith-Waterman score: 73;  32.000% identity (33.333% ungapped) in 75 aa
overlap (98-172:19-90)

        70        80        90       100       110       120
AvHPPD LAARSDLSTGNSAHASLLLRSGALAFLFTAPYAPPPQEAATAATASIPSFSADAARTFAA
                                       : ::   : :  ::.   ..       : :
ALLERG             ADLGYGPATPAAPAAGYTPAAPAGAEPAGKATTEEQKLIEKINAGFKA
                           10        20        30        40

       130       140       150       160       170       180
```

```
AvHPPD AHGLAVRSVGVRVADAAEAFRVSVAGGARPAFAPADLGHGFGLAEVELYGDVVLRFVSYP
       :  ::. ..::  ::  ..: .. ....  ::: .  :.  : ::
ALLERG A--LAA-AAGVPPADKYRTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAY
         50         60        70        80        90       100

       190       200       210       220       230       240
AvHPPD DETDLPFLPGFERVSSPGAVDYGLTRFDHVVGNVPEMAPVIDYMKGFLGFHEFAEFTAED

ALLERG KLAYKTAEGATPEAKYDAYVATLSEALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKV
         110       120       130       140       150       160
```