

**Event 5307 Maize:**

**Genome to Insert Junction Analysis for Translated Open Reading Frames with a  
Minimum Size of 30 Amino Acids: Assessment of Amino Acid Sequence  
Similarity to Known or Putative Allergens**

<b>Data Requirement:</b>	Not applicable
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<b>Study Completion Date:</b>	June 23, 2010
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<b>Syngenta Study No.:</b>	Not applicable
<b>Report No.:</b>	SSB-188-10

**STATEMENTS OF DATA CONFIDENTIALITY CLAIMS**

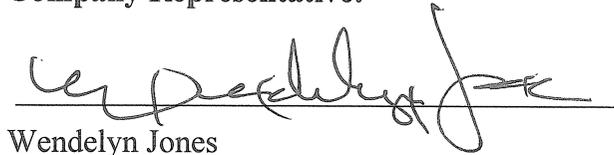
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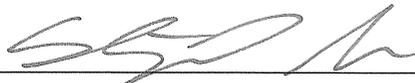
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**STATEMENT CONCERNING GOOD LABORATORY PRACTICES STANDARDS**

The provisions of Good Laboratory Practices Standards (GLPS) (40 CFR Part 160, US EPA 1989) pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act do not apply to this report because it summarizes the analyses of peptide sequence data. These analyses were performed according to accepted scientific practices, and relevant study records (including raw data) have been retained.

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## LIST OF ACRONYMS AND ABBREVIATIONS

3'	three prime
5'	five prime
BLOSUM50	Blocks Substitution Matrix50
Cry1Ab	Cry1Ab protein
Cry3A	Cry3A protein
DNA	deoxyribonucleic acid
<i>ecry3.1Ab</i>	eCry3.1Ab gene
eCry3.1Ab	eCry3.1Ab protein
FARRP	Food Allergy Research and Resource Program
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
GLPS	Good Laboratory Practices Standards
<i>manA</i>	phosphomannose isomerase gene
mCry3A	modified Cry3A protein
NCBI	National Center for Biotechnology Information
NTI	New Technologies Informax
ORF	open reading frame
<i>pmi</i>	phosphomannose isomerase gene
PMI	phosphomannose isomerase protein
US EPA	United States Environmental Protection Agency
®	registered trademark
™	trademark

## SUMMARY

Maize plants derived from transformation Event 5307 ("5307 maize") contain the gene *ecry3.1Ab* encoding an eCry3.1Ab protein and the gene *pmi* (also known as *manA*) encoding the enzyme phosphomannose isomerase (PMI).

Bioinformatic analysis of the deoxyribonucleic acid (DNA) sequences spanning the junctions between the maize genomic sequence and the 5307 maize insert identified one putative open reading frame (ORF) with a minimum putative translation size of 30 amino acids. For this analysis, ORFs were defined as any DNA sequence between a putative start codon (ATG) and putative stop codon (TAG, TAA, or TGA). To determine whether the translations of this putative ORF 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) AllergenOnline database, version 10.0, which contained 1,471 amino acid sequences of known and putative allergens. The first search looked for greater than 35% shared sequence identity over successive 80 amino acid peptides of the translated junction sequence when compared to each of the known or putative allergen sequences. The second search looked for eight or more contiguous amino acids in common with any known or putative allergen sequence.

In the first search, no significant sequence similarity (greater than 35% shared identity over any 80 amino acid peptide) was observed between any amino acid peptide of the translated putative ORF and any entry in the database. In the second search, no matches of eight or more contiguous amino acids were observed between the translated putative ORF and sequences in the FARRP AllergenOnline database. These results suggest that the amino acid translation of the putative ORF spanning the junction between the maize genomic sequence and the 3' region of the 5307 maize insert shares no biologically relevant amino acid sequence similarity to known or putative protein allergens.

## INTRODUCTION

Using the techniques of modern molecular biology, Syngenta has transformed maize (*Zea mays*) to produce Event 5307 maize, a new cultivar that has insecticidal activity against certain corn rootworm (*Diabrotica*) species. Maize plants derived from transformation Event 5307 ("5307 maize") contain the gene *ecry3.1Ab*, encoding an eCry3.1Ab protein and the gene *pmi* (also known as *mana*) encoding the enzyme phosphomannose isomerase (PMI). The eCry3.1Ab protein is an engineered chimera of modified Cry3A (mCry3A) and Cry1Ab proteins. The gene *pmi* was obtained from *Escherichia coli* strain K-12 and the protein it encodes was utilized as a plant selectable marker during development of 5307 maize.

Bioinformatic analysis was used to determine any putative open reading frames (ORFs) that span either junction between the maize genomic sequence and the 5307 maize insert. For this analysis, ORFs were defined as any deoxyribonucleic acid (DNA) sequence between a putative start codon (ATG) and a putative stop codon (TAG, TAA, or TGA) with a minimum putative translation size of 30 amino acids. The translation of any putative ORFs spanning either junction of the maize genomic sequence and the 5307 maize insert was systematically compared against the protein sequences in the Food Allergy Research and Resource Program (FARRP) AllergenOnline database, version 10.0 (FARRP 2010), located online at [www.allergenonline.org](http://www.allergenonline.org). The purpose of this analysis is to determine whether the amino acid translations of any putative ORFs spanning either junction of the maize genomic DNA and the 5307 maize insert have biologically relevant amino acid sequence similarity to known or putative protein allergens.

## MATERIALS AND METHODS

### ORF Determination

The insert and flanking sequences for 5307 maize were previously reported (New 2010a, New 2010b). The Vector NTI Advance™ program, version 10.3.0, was used to determine putative ORFs that span the junctions between the maize genomic sequence and the 5307 maize insert. For this analysis, putative ORFs were defined as DNA sequences that are contained between a putative start codon (ATG) and a putative stop codon (TAG, TAA, or TGA), and have a minimum translation size of 30 amino acids; these putative ORFs were determined and translated *in silico* into amino acid sequences. The translations of any putative ORFs spanning either junction of the maize genomic DNA and the 5307 maize insert were screened for biologically relevant amino acid sequence similarity to known or putative protein allergens.

### Allergen Similarity Search

The FARRP AllergenOnline database (2010) 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) Entrez® search and retrieval system, most recently searched in 2009

(NCBI 2009). 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 (2010) contains 1,471 nonredundant entries (Appendix).

Similarity searches were performed using an exact copy of the entire list of sequences in the current version of the FARRP AllergenOnline database (2010) (maintained at Syngenta Biotechnology, Inc., Research Triangle Park, NC, USA). Two different sequence searches were performed in order to compare the translated junction sequences with sequences in the FARRP AllergenOnline database (2010).

In the first search, the FASTA search algorithm, version 3.45 (Pearson and Lipman 1988), was used to assess overall sequence similarity by comparing sequential 80 amino acid peptides of any translated putative ORFs spanning either junction of the maize genomic DNA and the 5307 maize insert with the sequences in the FARRP AllergenOnline database (2010). Each successive “window” of 80 amino acids was offset from the previous window by one residue, such that each peptide overlapped the previous peptide by 79 amino acids. 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 same scoring matrix used by the authors of the FARRP AllergenOnline database (2010). The BLOSUM50 matrix is weighted to favor identical amino acids likely to impact protein structure.

In the second search, any translated putative ORFs spanning either junction of the maize genomic DNA and the 5307 maize insert were 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 of any translated putative ORFs spanning either junction of the maize genomic DNA and the 5307 maize insert with the sequences in the FARRP AllergenOnline database (2010).

### **Assessment of Alignment Significance**

The FASTA search produces alignments between the 80 amino acid peptides of any translated putative ORFs spanning either junction of the maize genomic DNA and the 5307 maize insert and the sequences in the allergen database. The evaluation of each query peptide sequence alignment utilizes the minimum criterion of 80 amino acids of alignment length with greater than 35% shared amino acid identity. Any alignments exceeding this criterion for shared sequence similarity indicate the potential for immunologically relevant sequence similarity (Codex Alimentarius Commission 2003).

Additionally, any match of eight (or more) identical contiguous amino acids between any translated putative ORFs spanning either junction of the maize genomic DNA and the 5307 maize insert and any sequence in the allergen database indicates the potential for immunologically relevant sequence similarity (Codex Alimentarius Commission 2003).

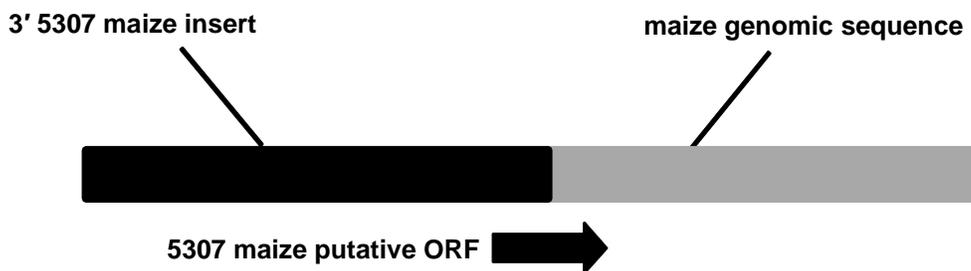
**RESULTS**

The reading frame analysis determined one putative ORF spanning the junction between the maize genomic sequence and the 3' region of the 5307 maize insert (5307 maize putative ORF). Table 1 shows the size of the putative ORF in base pairs, the translation of this sequence, and the size of the translation in amino acids. Figure 1 illustrates the location of the 5307 maize putative ORF.

**Table 1. Putative ORFs spanning either junction of the maize genomic DNA and the 5307 maize insert**

Sequence name (Figure 1)	Size of sequence analyzed (base pairs)	Size of putative translation (amino acid)	Putative translation
5307 maize putative ORF	243	81	MLLDLLALQEIYRCPPGGQHGRIRNVLL SCLSVNLFTPQYTLFPGPGWAHWQR VHRTVRCPKARNPSFCFVLFFQFGFC SNL

**Figure 1. Location of the 5307 maize putative ORF**



No significant sequence similarity was observed between the translated 5307 maize putative ORF and any entry in the FARRP AllergenOnline database (2010). Additionally, no matches were observed between any sequence of eight or more contiguous amino acids of the translated 5307 maize putative ORF and any entry in the FARRP AllergenOnline database (2010).

**Data Quality and Integrity**

No circumstances occurred during the conduct of this analysis that would have adversely affected the quality or integrity of the data generated.

**CONCLUSION**

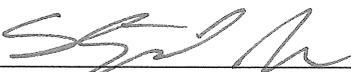
One putative ORF spanning the junction between the maize genomic sequence and the 3' region of the 5307 maize insert was determined. Comparisons to the FARRP AllergenOnline database suggest that the amino acid translation of this putative ORF shows no biologically relevant amino acid sequence similarity to any known or putative protein allergens.

**RECORDS RETENTION**

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

**CONTRIBUTING SCIENTISTS**

The analytical work reported herein was conducted by Stephen New, B.S., and Brian Harper, M.S. This work was conducted at Syngenta Biotechnology, Inc.

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**APPENDIX**
**Protein sequences included in the FARRP AllergenOnline database, version 10.0**

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	<i>Acarus siro</i>	Mite	Unassigned	allergen Aca s 13 [Acarus siro]	118638268
2	<i>Actinidia chinensis</i>	Kiwi	Unassigned	Thaumatococin-like protein (Allergen Act c 2)	68064399
3	<i>Actinidia chinensis</i>	Kiwi	Unassigned	Kiwellin (Allergen Act c ?)	85701136
4	<i>Actinidia chinensis</i>	Kiwi	Unassigned	RecName: Full=Actinidain; Short=Actinidin; AltName: Allergen=Act c 1; Flags: Precursor	190358935
5	<i>Actinidia deliciosa</i>	Kiwi	Unassigned	unnamed protein product [Actinidia deliciosa]	15984
6	<i>Actinidia deliciosa</i>	Kiwi	Unassigned	Actinidin	166317
7	<i>Actinidia deliciosa</i>	Kiwi	Unassigned	phytolectin [Actinidia deliciosa]	40807635
8	<i>Actinidia deliciosa</i>	Kiwi	Act c 2	thaumatococin-like protein [Actinidia deliciosa]	71057064
9	<i>Actinidia deliciosa</i>	Kiwi	Unassigned	thaumatococin-like protein [Actinidia deliciosa]	146737976
10	<i>Aedes aegypti</i>	Yellow fever mosquito	Aed a 2	D7 protein precursor (Allergen Aed a 2)	118216
11	<i>Aedes aegypti</i>	Yellow fever mosquito	Aed a 1	Apyrase	556272
12	<i>Aedes aegypti</i>	Yellow fever mosquito	Unassigned	30 kDa salivary gland allergen Aed a 3 [Aedes aegypti]	2114497
13	<i>Aedes aegypti</i>	Yellow fever mosquito	Unassigned	30 kDa salivary gland allergen variant 2 [Aedes aegypti]	94468546
14	<i>Aedes aegypti</i>	Yellow fever mosquito	Unassigned	30 kDa salivary gland allergen variant 3 [Aedes aegypti]	94468552
15	<i>Aedes aegypti</i>	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

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
16	<i>Aedes aegypti</i>	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
17	<i>Aedes albopictus</i>	Asian tiger mosquito	Unassigned	30 kDa salivary gland allergen 30k-3 [ <i>Aedes albopictus</i> ]	56417504
18	<i>Aedes albopictus</i>	Asian tiger mosquito	Unassigned	GE-rich salivary protein 30k-4 [ <i>Aedes albopictus</i> ]	56417506
19	<i>Agrostis alba</i>	Bent grass	Unassigned	pollen allergen Agr a I - bent grass (fragment)	320606
20	<i>Agrostis alba</i>	Bent grass	Unassigned	Group I allergen Agr a I (Form 2), pollen	75139987
21	<i>Agrostis alba</i>	Bent grass	Unassigned	Group I allergen Agr a I (Form 1), pollen	75139989
22	<i>Alnus glutinosa</i>	Alder	Unassigned	Aln g I=major allergen [ <i>Alnus glutinosa</i> =alder trees, pollen, Peptide Partial, 44 aa]	239733
23	<i>Alnus glutinosa</i>	Alder	Aln g 1	Aln g I [ <i>Alnus glutinosa</i> ]	261407
24	<i>Alnus glutinosa</i>	Alder	Unassigned	pollen allergen Aln g 4 [ <i>Alnus glutinosa</i> ]	3319651
25	<i>Alternaria alternata</i>	Fungus	Unassigned	Minor allergen Alt a 7 (Alt a VII)	1168402
26	<i>Alternaria alternata</i>	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
27	<i>Alternaria alternata</i>	Fungus	Alt a 12	60S acidic ribosomal protein P1 (Allergen Alt a 12) (Alt a XII)	1350779
28	<i>Alternaria alternata</i>	Fungus	Alt a 1	major allergen Alt a 1 subunit [ <i>Alternaria alternata</i> ]	1842045
29	<i>Alternaria alternata</i>	Fungus	Alt a 5	ribosomal P2 phosphoprotein [ <i>Alternaria alternata</i> ]	1850540
30	<i>Alternaria alternata</i>	Fungus	Alt a 6	Enolase (2-phosphoglycerate dehydratase) (2-phospho-D-glycerate hydro-lyase) (Major allergen Alt a 11) (Alt a XI)	14423684

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
31	<i>Alternaria alternata</i>	Fungus	Alt a 3	Heat shock 70 kDa protein (Allergen Alt a 3)	14423730
32	<i>Alternaria alternata</i>	Fungus	Unassigned	putative nuclear transport factor 2 [Alternaria alternata]	21748153
33	<i>Alternaria alternata</i>	Fungus	Alt a 1	major allergen alt a1 [Alternaria alternata]	21913174
34	<i>Alternaria alternata</i>	Fungus	Unassigned	glutathione-S-transferase [Alternaria alternata]	41057621
35	<i>Alternaria alternata</i>	Fungus	Unassigned	major allergen Alt a 1 subunit [Alternaria alternata]	45680856
36	<i>Alternaria alternata</i>	Fungus	Unassigned	RecName: Full=Glutathione-S-transferase; AltName: Allergen=Alt a 13	74611808
37	<i>Alternaria alternata</i>	Fungus	Unassigned	aldehyde dehydrogenase (NAD+) [Alternaria alternata]	76666767
38	<i>Alternaria alternata</i>	Fungus	Alt a 4	Protein disulfide-isomerase (PDI) (Allergen Alt a 4)	85701160
39	<i>Ambrosia artemisiifolia</i>	Short ragweed	Amb a 1.1	Pollen allergen Amb a 1.1 precursor (Antigen E) (AgE) (Antigen Amb a I)	113475
40	<i>Ambrosia artemisiifolia</i>	Short ragweed	Amb a 1.2	Pollen allergen Amb a 1.2 precursor (Antigen E) (Antigen Amb a I) (AaBA protein)	113476
41	<i>Ambrosia artemisiifolia</i>	Short ragweed	Amb a 1.3	Pollen allergen Amb a 1.3 precursor (Antigen E) (Antigen Amb a I)	113477
42	<i>Ambrosia artemisiifolia</i>	Short ragweed	Amb a 1.4	Pollen allergen Amb a 1.4 precursor (Antigen E) (Antigen Amb a I)	113478
43	<i>Ambrosia artemisiifolia</i>	Short ragweed	Amb a 2	Pollen allergen Amb a 2 precursor (Antigen K) (Antigen Amb a II)	113479
44	<i>Ambrosia artemisiifolia</i>	Short ragweed	Amb a 1.3	antigen E	166443
45	<i>Ambrosia artemisiifolia</i>	Short ragweed	Amb a 6	Nonspecific lipid-transfer protein precursor (LTP) (Pollen allergen Amb a 6) (Amb a VI) (Allergen Ra6)	14285595
46	<i>Ambrosia artemisiifolia</i>	Short ragweed	Unassigned	profilin-like protein [Ambrosia artemisiifolia]	34851178
47	<i>Ambrosia artemisiifolia</i>	Short ragweed	Unassigned	profilin-like protein [Ambrosia artemisiifolia]	34851180

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
48	<i>Ambrosia artemisiifolia</i>	Short ragweed	Unassigned	profilin-like protein [Ambrosia artemisiifolia]	34851182
49	<i>Ambrosia artemisiifolia</i>	Short ragweed	Unassigned	profilin isoallergen 1 [Ambrosia artemisiifolia]	62249502
50	<i>Ambrosia artemisiifolia</i>	Short ragweed	Unassigned	profilin isoallergen 2 [Ambrosia artemisiifolia]	62249512
51	<i>Ambrosia artemisiifolia (elatior)</i>	Short ragweed	Amb a 5	Pollen allergen Amb a 5 (Amb a V) (Allergen Ra5)	114090
52	<i>Ambrosia artemisiifolia (elatior)</i>	Short ragweed	Amb a 3	Pollen allergen Amb a 3 (Amb a III) (Allergen Ra3)	416636
53	<i>Ambrosia psilostachya</i>	Western ragweed	Unassigned	Amb p V allergen	515953
54	<i>Ambrosia psilostachya</i>	Western ragweed	Unassigned	Amb p V allergen	515954
55	<i>Ambrosia psilostachya</i>	Western ragweed	Unassigned	Amb p V allergen	515955
56	<i>Ambrosia psilostachya</i>	Western ragweed	Unassigned	Amb p V allergen	515956
57	<i>Ambrosia psilostachya</i>	Western ragweed	Unassigned	Amb p V allergen	515957
58	<i>Ambrosia trifida</i>	Giant ragweed	Amb t 5	Pollen allergen Amb t 5 precursor (Amb t V) (Allergen Ra5G)	114091
59	<i>Anacardium occidentale</i>	Cashew	Ana o 1	vicilin-like protein [Anacardium occidentale]	21666498
60	<i>Anacardium occidentale</i>	Cashew	Ana o 1	vicilin-like protein [Anacardium occidentale]	21914823
61	<i>Anacardium occidentale</i>	Cashew	Ana o 3	2s albumin [Anacardium occidentale]	24473800
62	<i>Anacardium occidentale</i>	Cashew	Ana o 2	allergen Ana 0 2 [Anacardium occidentale]	25991543
63	<i>Ananas comosus</i>	Pineapple	Unassigned	Bromelain precursor (Allergen Ana c 2)	75277440
64	<i>Ananas comosus</i>	Pineapple	Unassigned	RecName: Full=Profilin; AltName: Full=Minor food allergen Ana c 1; AltName: Allergen=Ana c 1	75306610
65	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	troponin-like protein [Anisakis simplex]	6065738
66	<i>Anisakis simplex</i>	Parasitic fish worm	Ani s 2	paramyosin isoform [Anisakis simplex]	8453086
67	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	21k allergen [Anisakis simplex]	31339067

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
68	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	Paramyosin (Allergen Ani s 2)	42559536
69	<i>Anisakis simplex</i>	Parasitic fish worm	Ani s 4	Allergen Ani s 4	47605398
70	<i>Anisakis simplex</i>	Parasitic fish worm	Ani s 1	Major allergen Ani s 1 precursor (Excretory gland allergen Ans1) (21 kDa allergen)	47605452
71	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	ani s 4 allergen [Anisakis simplex]	110346534
72	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	UA3-recognized allergen [Anisakis simplex]	119524036
73	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein [Anisakis simplex]	121308878
74	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	protease inhibitor [Anisakis simplex]	121308880
75	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 1 [Anisakis simplex]	155676636
76	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 2 [Anisakis simplex]	155676682
77	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 3 [Anisakis simplex]	155676684
78	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 4 [Anisakis simplex]	155676686
79	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 5 [Anisakis simplex]	155676688
80	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 6 [Anisakis simplex]	155676690
81	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 7 [Anisakis simplex]	155676692
82	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 8 [Anisakis simplex]	155676694
83	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 9 [Anisakis simplex]	155676696
84	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	SXP/RAL-2 family protein 2 isoform 10 [Anisakis simplex]	155676698
85	<i>Anisakis simplex</i>	Parasitic fish worm	Unassigned	Ani s 9 allergen precursor [Anisakis simplex]	157418806
86	<i>Anthoxanthum odoratum</i>	Sweet vernal grass	Unassigned	pollen allergen Ant o I - sweet vernal grass (fragment)	320607
87	<i>Anthoxanthum odoratum</i>	Sweet vernal grass	Unassigned	Group I allergen Ant o I (Form 1), pollen	75139986

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
88	<i>Anthoxanthum odoratum</i>	Sweet vernal grass	Unassigned	Group I allergen Ant o I (Form 2), pollen	75139990
89	<i>Apis cerana</i>	Indian honeybee	Unassigned	phospholipase A2 (EC 3.1.1.4), venom - Indian honeybee	7435005
90	<i>Apis cerana cerana</i>	Indian honeybee	Unassigned	Phospholipase A2 (Phosphatidylcholine 2-acylhydrolase)	24638082
91	<i>Apis dorsata</i>	Giant honeybee	Unassigned	Melittin	126955
92	<i>Apis dorsata</i>	Giant honeybee	Unassigned	Phospholipase A2 (Phosphatidylcholine 2-acylhydrolase)	47117012
93	<i>Apis mellifera</i>	Honeybee	Unassigned	melittin, minor - honeybee	69552
94	<i>Apis mellifera</i>	Honeybee	Unassigned	Melittin precursor (Allergen Api m 3) (Api m III)	126949
95	<i>Apis mellifera</i>	Honeybee	Api m 2	Hyaluronoglucosaminidase precursor (Hyaluronidase) (Hya) (Allergen Api m 2) (Api m II)	585279
96	<i>Apis mellifera</i>	Honeybee	Api m 1	Phospholipase A2 precursor (Phosphatidylcholine 2-acylhydrolase) (Allergen Api m 1) (Api m I)	24418862
97	<i>Apis mellifera</i>	Honeybee	Unassigned	allergen Api m 6 precursor [Apis mellifera]	94400875
98	<i>Apis mellifera</i>	Honeybee	Unassigned	allergen Api m 6 variant 1 [Apis mellifera]	94400907
99	<i>Apis mellifera</i>	Honeybee	Unassigned	icarapin variant 1 precursor [Apis mellifera]	94471622
100	<i>Apis mellifera</i>	Honeybee	Unassigned	icarapin variant 2 precursor [Apis mellifera]	94471624
101	<i>Apium graveolens</i>	Celery	Api g 1.0101	Major allergen Api g 1 (Api g 1.0101) (Api g I)	1346568
102	<i>Apium graveolens</i>	Celery	Api g 4	profilin [Apium graveolens]	4761578
103	<i>Apium graveolens</i>	Celery	Api g 1.0201	Major allergen Api g 2 (Api g 1.0201)	14423646
104	<i>Apium graveolens</i>	Celery	Unassigned	[Segment 2 of 4] Allergen Api g 5	32363124
105	<i>Apium graveolens</i>	Celery	Unassigned	[Segment 3 of 4] Allergen Api g 5	32363125
106	<i>Apium graveolens</i>	Celery	Unassigned	[Segment 4 of 4] Allergen Api g 5	32363126
107	<i>Apium graveolens</i>	Celery	Unassigned	[Segment 1 of 4] Allergen Api g 5	33300921

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
108	<i>Arachis hypogaea</i>	Peanut	Unassigned	peanut agglutinin precursor; prePNA [Arachis hypogaea]	253289
109	<i>Arachis hypogaea</i>	Peanut	Ara h 1	Allergen Ara h 1, clone P17 precursor (Ara h I)	1168390
110	<i>Arachis hypogaea</i>	Peanut	Ara h 1	Allergen Ara h 1, clone P41B precursor (Ara h I)	1168391
111	<i>Arachis hypogaea</i>	Peanut	Ara h 3	glycinin [Arachis hypogaea]	3703107
112	<i>Arachis hypogaea</i>	Peanut	Ara h 4	glycinin [Arachis hypogaea]	5712199
113	<i>Arachis hypogaea</i>	Peanut	Ara h 5	profilin [Arachis hypogaea]	5902968
114	<i>Arachis hypogaea</i>	Peanut	Ara h 6	allergen Ara h 6 [Arachis hypogaea]	5923742
115	<i>Arachis hypogaea</i>	Peanut	Ara h 7	allergen [Arachis hypogaea]	5931948
116	<i>Arachis hypogaea</i>	Peanut	Unassigned	allergen II [Arachis hypogaea]	15418705
117	<i>Arachis hypogaea</i>	Peanut	Unassigned	conglutin [Arachis hypogaea]	17225991
118	<i>Arachis hypogaea</i>	Peanut	Unassigned	allergen Ara h 3/Ara h 4 [Arachis hypogaea]	21314465
119	<i>Arachis hypogaea</i>	Peanut	Unassigned	trypsin inhibitor [Arachis hypogaea]	22135348
120	<i>Arachis hypogaea</i>	Peanut	Ara h 2.02	allergen Ara h 2.02 [Arachis hypogaea]	26245447
121	<i>Arachis hypogaea</i>	Peanut	Ara h 2	allergen Ara h 2 isoform [Arachis hypogaea]	31322017
122	<i>Arachis hypogaea</i>	Peanut	Ara h 8	Ara h 8 allergen [Arachis hypogaea]	37499626
123	<i>Arachis hypogaea</i>	Peanut	Unassigned	conarachin [Arachis hypogaea]	46560472
124	<i>Arachis hypogaea</i>	Peanut	Unassigned	conarachin [Arachis hypogaea]	46560474
125	<i>Arachis hypogaea</i>	Peanut	Unassigned	conarachin [Arachis hypogaea]	46560476
126	<i>Arachis hypogaea</i>	Peanut	Unassigned	RecName: Full=Conglutin; AltName: Allergen=Ara h 6; Flags: Precursor	75114094
127	<i>Arachis hypogaea</i>	Peanut	Unassigned	iso-Ara h 3 [Arachis hypogaea]	112380623
128	<i>Arachis hypogaea</i>	Peanut	Unassigned	Ara h 8 allergen isoform [Arachis hypogaea]	145904610
129	<i>Arachis hypogaea</i>	Peanut	Unassigned	Ara h 7 allergen precursor [Arachis hypogaea]	158121995
130	<i>Arachis hypogaea</i>	Peanut	Unassigned	Chain A, Allergen Ara h 6 From Peanut (Arachis Hypogaea)	159163254

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
131	<i>Arachis hypogaea</i>	Peanut	Unassigned	LTP isoallergen 1 precursor [Arachis hypogaea]	161087230
132	<i>Arachis hypogaea</i>	Peanut	Unassigned	LTP isoallergen 2 [Arachis hypogaea]	161610580
133	<i>Arachis hypogaea</i>	Peanut	Unassigned	Ara h 8 allergen isoform 3 [Arachis hypogaea]	169786740
134	<i>Arachis hypogaea</i>	Peanut	Unassigned	arachin Arah3 isoform [Arachis hypogaea]	199732457
135	<i>Arachis hypogaea</i>	Peanut	Unassigned	Chain A, Crystal Structure Of Peanut Major Allergen Ara H 3	224036293
136	<i>Arachis hypogaea</i>	Peanut	Unassigned	Ara h 2.01 allergen [Arachis hypogaea]	224747150
137	<i>Argas reflexus</i>	European pigeon tick	Arg r 1	Arg r 1 precursor [Argas reflexus]	58371884
138	<i>Artemisia vulgaris</i>	Mugwort	Art v 1	major pollen allergen Art v 1 precursor [Artemisia vulgaris]	27818335
139	<i>Artemisia vulgaris</i>	Mugwort	Unassigned	Amb a 1-like protein [Artemisia vulgaris]	62530263
140	<i>Artemisia vulgaris</i>	Mugwort	Unassigned	Nonspecific lipid-transfer protein (LTP) (Pollen allergen Art v 3)	73621307
141	<i>Artemisia vulgaris</i>	Mugwort	Unassigned	Profilin-1 (Pollen allergen Art v 4.01)	73621415
142	<i>Artemisia vulgaris</i>	Mugwort	Unassigned	Profilin-2 (Pollen allergen Art v 4.02)	73621416
143	<i>Artemisia vulgaris</i>	Mugwort	Unassigned	art v 2 allergen [Artemisia vulgaris]	148887203
144	<i>Arthroderma benhamiae</i>	Fungus	Unassigned	tri m 4 allergen [Arthroderma benhamiae]	23894232
145	<i>Arthroderma benhamiae</i>	Fungus	Unassigned	tri m 2 allergen [Arthroderma benhamiae]	23894240
146	<i>Arthroderma benhamiae</i>	Fungus	Unassigned	tri m 2 allergen [Arthroderma benhamiae]	23894244
147	<i>Arthroderma benhamiae</i>	Fungus	Unassigned	tri m 2 allergen [Arthroderma benhamiae]	23894248
148	<i>Arthroderma vanbreuseghemii</i>	Fungus	Unassigned	allergen [Arthroderma vanbreuseghemii]	219687753
149	<i>Ascaris lumbricoides</i>	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735096
150	<i>Ascaris lumbricoides</i>	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735098
151	<i>Ascaris lumbricoides</i>	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735100
152	<i>Ascaris lumbricoides</i>	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735102

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
153	<i>Ascaris lumbricoides</i>	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735106
154	<i>Ascaris lumbricoides</i>	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735108
155	<i>Ascaris lumbricoides</i>	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735110
156	<i>Ascaris lumbricoides</i>	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735112
157	<i>Ascaris lumbricoides</i>	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735114
158	<i>Ascaris lumbricoides</i>	Parasitic roundworm	Unassigned	ABA-1 allergen [Ascaris lumbricoides]	2735118
159	<i>Ascaris lumbricoides</i>	Parasitic roundworm	Unassigned	tropomyosin [Ascaris lumbricoides]	224016002
160	<i>Ascaris suum</i>	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
161	<i>Ascaris suum</i>	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
162	<i>Aspergillus flavus</i>	Fungus	Unassigned	Allergen Asp fl 1	74665726
163	<i>Aspergillus fumigatus</i>	Fungus	Asp f 2	Asp Fil [Aspergillus fumigatus]	664852
164	<i>Aspergillus fumigatus</i>	Fungus	Asp f 10	aspergillopepsin i [Aspergillus fumigatus]	963013
165	<i>Aspergillus fumigatus</i>	Fungus	Asp f 6	manganese superoxide dismutase [Aspergillus fumigatus]	1648970
166	<i>Aspergillus fumigatus</i>	Fungus	Unassigned	cellular serine proteinase [Aspergillus fumigatus]	2143220
167	<i>Aspergillus fumigatus</i>	Fungus	Asp f 3	peroxisomal-like protein [Aspergillus fumigatus]	2769700
168	<i>Aspergillus fumigatus</i>	Fungus	Asp f 9	rAsp f 9 [Aspergillus fumigatus]	2879890
169	<i>Aspergillus fumigatus</i>	Fungus	Asp f 4	rAsp f 4 [Aspergillus fumigatus]	3005839
170	<i>Aspergillus fumigatus</i>	Fungus	Asp f 1	Aspf1 allergen [Aspergillus fumigatus]	3021324
171	<i>Aspergillus fumigatus</i>	Fungus	Asp f 16	allergen [Aspergillus fumigatus]	3643813

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
172	<i>Aspergillus fumigatus</i>	Fungus	Asp f 11	PPIase [ <i>Aspergillus fumigatus</i> ]	5019414
173	<i>Aspergillus fumigatus</i>	Fungus	Asp f 8	rAsp f 8 [ <i>Aspergillus fumigatus</i> ]	6686524
174	<i>Aspergillus fumigatus</i>	Fungus	Asp f 1	major allergen I 18kDa antigen [ <i>Aspergillus fumigatus</i> ]	9280360
175	<i>Aspergillus fumigatus</i>	Fungus	Asp f 22	enolase [ <i>Aspergillus fumigatus</i> ]	13925873
176	<i>Aspergillus fumigatus</i>	Fungus	Unassigned	large subunit ribosomal protein L3 [ <i>Aspergillus fumigatus</i> ]	21215170
177	<i>Aspergillus fumigatus</i>	Fungus	Unassigned	Ribonuclease mitogillin precursor (Major allergen Asp f 1) (Asp f I) (Allergen I/a) (IgE-binding ribotoxin)	54039254
178	<i>Aspergillus fumigatus</i>	Fungus	Unassigned	Enolase (2-phosphoglycerate dehydratase) (2-phospho-D-glycerate hydro-lyase) (Allergen Asp f 22)	83288046
179	<i>Aspergillus fumigatus</i>	Fungus	Asp f 2	Major allergen Asp f 2 precursor (Asp f II)	83300352
180	<i>Aspergillus fumigatus</i>	Fungus	Unassigned	Allergen Asp f 4 precursor	83300369
181	<i>Aspergillus fumigatus</i>	Fungus	Asp f 7	Allergen Asp f 7 precursor	83300389
182	<i>Aspergillus fumigatus</i>	Fungus	Asp f 12	Heat shock protein 90 (Heat shock protein hsp1) (65 kDa IgE-binding protein) (Allergen Asp f 12)	83303658
183	<i>Aspergillus fumigatus</i>	Fungus	Unassigned	60S ribosomal protein L3 (Allergen Asp f 23)	83305621
184	<i>Aspergillus fumigatus</i>	Fungus	Unassigned	60S acidic ribosomal protein P2 (Allergen Asp f 8) (AfP2)	83305635
185	<i>Aspergillus fumigatus</i>	Fungus	Unassigned	Superoxide dismutase [Mn], mitochondrial precursor (Allergen Asp f 6)	83305645
186	<i>Aspergillus fumigatus</i>	Fungus	Unassigned	Probable glycosidase crf1 precursor (Crh-like protein) (Allergen Asp f 9)	85540942
187	<i>Aspergillus fumigatus</i> Af293	Fungus	Unassigned	allergen Asp F3 [ <i>Aspergillus fumigatus</i> Af293]	66845476
188	<i>Aspergillus fumigatus</i> Af293	Fungus	Unassigned	molecular chaperone and allergen Mod-E/Hsp90/Hsp1 [ <i>Aspergillus fumigatus</i> Af293]	66845554

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
189	<i>Aspergillus fumigatus</i> Af293	Fungus	Unassigned	allergen Asp F4 [ <i>Aspergillus fumigatus</i> Af293]	66847146
190	<i>Aspergillus fumigatus</i> Af293	Fungus	Unassigned	major allergen Asp F2 [ <i>Aspergillus fumigatus</i> Af293]	66849502
191	<i>Aspergillus fumigatus</i> Af293	Fungus	Unassigned	allergen Asp F7 [ <i>Aspergillus fumigatus</i> Af293]	66849793
192	<i>Aspergillus niger</i>	Fungus	Unassigned	serine protease	289172
193	<i>Aspergillus niger</i>	Fungus	Asp n 14	xylosidase [ <i>Aspergillus</i> <i>niger</i> ]	2181180
194	<i>Aspergillus niger</i>	Fungus	Asp n 14	beta-xylosidase [ <i>Aspergillus niger</i> ]	4235093
195	<i>Aspergillus oryzae</i>	Fungus	Asp o 13	Oryzin precursor (Alkaline proteinase) (ALP) ( <i>Aspergillus</i> proteinase B) ( <i>Aspergillopeptidase</i> B)	129235
196	<i>Aspergillus oryzae</i>	Fungus	Asp o 21	Alpha-amylase A type- 1/2 precursor (Taka- amylase A) (TAA) (1,4- alpha-D-glucan glucanohydrolase)	94706935
197	<i>Bacillus lentus</i>	Bacteria	Unassigned	RecName: Full=Subtilisin Savinase; AltName: Full=Alkaline protease	267048
198	<i>Bacillus licheniformis</i>	Bacteria	Unassigned	RecName: Full=Subtilisin Carlsberg; Flags: Precursor	135016
199	<i>Bacillus licheniformis</i>	Bacteria	Unassigned	subtilisin precursor [ <i>Bacillus licheniformis</i> ]	11127680
200	<i>Bacillus</i> sp.	Bacteria	Unassigned	prepro AprM [ <i>Bacillus</i> sp.]	1225905
201	<i>Balanus rostratus</i>	Barnacle	Unassigned	tropomyosin [ <i>Balanus</i> <i>rostratus</i> ]	125659386
202	<i>Batillus cornutus</i>	Japanese turban shell	Unassigned	[Segment 1 of 6] Tropomyosin (Major allergen Tur c 1)	47117350
203	<i>Batillus cornutus</i>	Japanese turban shell	Unassigned	[Segment 2 of 6] Tropomyosin (Major allergen Tur c 1)	47117351
204	<i>Batillus cornutus</i>	Japanese turban shell	Unassigned	tropomyosin [ <i>Turbo</i> <i>cornutus</i> ]	219806588
205	<i>Bertholletia excelsa</i>	Brazil nut	Unassigned	2S albumin [ <i>Bertholletia excelsa</i> ]	17713
206	<i>Bertholletia excelsa</i>	Brazil nut	Ber e 1	2S sulfur-rich seed storage protein precursor (Allergen Ber e 1)	112754
207	<i>Bertholletia excelsa</i>	Brazil nut	Ber e 2	11S globulin [ <i>Bertholletia excelsa</i> ]	30313867

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
208	<i>Betula pendula</i>	European white birch	Bet v 1	Major pollen allergen Bet v 1-A (Allergen Bet v I-A)	114922
209	<i>Betula pendula</i>	European white birch	Bet v 2	Profilin (Pollen allergen Bet v 2) (Bet v II)	130975
210	<i>Betula pendula</i>	European white birch	Unassigned	Bet v I=major allergen [Betula verrucosa=birch trees, pollen, Peptide Partial, 43 aa]	239734
211	<i>Betula pendula</i>	European white birch	Bet v 1	major pollen allergen Bet v I - European white birch (fragment)	320545
212	<i>Betula pendula</i>	European white birch	Unassigned	major pollen allergen Bet v II - European white birch (fragment)	320546
213	<i>Betula pendula</i>	European white birch	Bet v 1	1 Sc-3 [Betula pendula]	534898
214	<i>Betula pendula</i>	European white birch	Bet v 1	1 Sc2 [Betula pendula]	534900
215	<i>Betula pendula</i>	European white birch	Bet v 1	1-Sc1 [Betula pendula]	534910
216	<i>Betula pendula</i>	European white birch	Bet v 3	Calcium-binding allergen Bet v 3 (Bet v III)	1168696
217	<i>Betula pendula</i>	European white birch	Bet v 1.0201	Major pollen allergen Bet v 1-B (Bet v I-B)	1168701
218	<i>Betula pendula</i>	European white birch	Bet v 1.0301	Major pollen allergen Bet v 1-C (Bet v I-C)	1168702
219	<i>Betula pendula</i>	European white birch	Bet v 1	Major pollen allergen Bet v 1-D/H (Bet v I-D/H)	1168703
220	<i>Betula pendula</i>	European white birch	Bet v 1.0501	Major pollen allergen Bet v 1-E (Bet v I-E)	1168704
221	<i>Betula pendula</i>	European white birch	Bet v 1f/l	Major pollen allergen Bet v 1-F/l (Bet v I-F/l)	1168705
222	<i>Betula pendula</i>	European white birch	Bet v 1.0701	Major pollen allergen Bet v 1-G (Bet v I-G)	1168706
223	<i>Betula pendula</i>	European white birch	Bet v 1.0801	Major pollen allergen Bet v 1-J (Bet v I-J)	1168707
224	<i>Betula pendula</i>	European white birch	Bet v 1.0901	Major pollen allergen Bet v 1-K (Bet v I-K)	1168708
225	<i>Betula pendula</i>	European white birch	Bet v 1.1001	Major pollen allergen Bet v 1-L (Bet v I-L)	1168709
226	<i>Betula pendula</i>	European white birch	Bet v 1m/n	Major pollen allergen Bet v 1-M/N (Bet v I-M/N)	1168710
227	<i>Betula pendula</i>	European white birch	Bet v 1.1601	major allergen Bet v 1 [Betula pendula]	1321714
228	<i>Betula pendula</i>	European white birch	Bet v 1.1701	major allergen Bet v 1 [Betula pendula]	1321716
229	<i>Betula pendula</i>	European white birch	Bet v 1.1801	major allergen Bet v 1 [Betula pendula]	1321718
230	<i>Betula pendula</i>	European white birch	Bet v 1.1502	major allergen Bet v 1 [Betula pendula]	1321720

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
231	<i>Betula pendula</i>	European white birch	Bet v 1.1901	major allergen Bet v 1 [Betula pendula]	1321722
232	<i>Betula pendula</i>	European white birch	Bet v 1.2001	major allergen Bet v 1 [Betula pendula]	1321724
233	<i>Betula pendula</i>	European white birch	Bet v 1.2101	major allergen Bet v 1 [Betula pendula]	1321726
234	<i>Betula pendula</i>	European white birch	Bet v 1.2201	major allergen Bet v 1 [Betula pendula]	1321728
235	<i>Betula pendula</i>	European white birch	Bet v 1.2401	pollen allergen Bet v 1 [Betula pendula]	1542861
236	<i>Betula pendula</i>	European white birch	Bet v 1.2501	pollen allergen Bet v 1 [Betula pendula]	1542863
237	<i>Betula pendula</i>	European white birch	Bet v 1.2601	pollen allergen Bet v 1 [Betula pendula]	1542865
238	<i>Betula pendula</i>	European white birch	Bet v 1.2701	pollen allergen Bet v 1 [Betula pendula]	1542867
239	<i>Betula pendula</i>	European white birch	Bet v 1.2801	pollen allergen Bet v 1 [Betula pendula]	1542869
240	<i>Betula pendula</i>	European white birch	Bet v 1.2901	pollen allergen Bet v 1 [Betula pendula]	1542871
241	<i>Betula pendula</i>	European white birch	Bet v 1.3001	pollen allergen Bet v 1 [Betula pendula]	1542873
242	<i>Betula pendula</i>	European white birch	Bet v 1.2301	major allergen Bet v 1 [Betula pendula]	2414158
243	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen Betv1 [Betula pendula]	2564220
244	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen Betv1 [Betula pendula]	2564222
245	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen Betv1 [Betula pendula]	2564224
246	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen Betv1 [Betula pendula]	2564228
247	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen Betv1, isoform at8 [Betula pendula]	4006928
248	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen Betv1, isoform at10 [Betula pendula]	4006945
249	<i>Betula pendula</i>	European white birch	Unassigned	pollen allergen Betv1, isoform at14 [Betula pendula]	4006947
250	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen Betv1, isoform at37 [Betula pendula]	4006953
251	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen Betv1, isoform at42 [Betula pendula]	4006955
252	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen Betv1, isoform at45 [Betula pendula]	4006957
253	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen Betv1, isoform at50 [Betula pendula]	4006959

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
254	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen Betv1, isoform at59 [Betula pendula]	4006961
255	<i>Betula pendula</i>	European white birch	Unassigned	pollen allergen Betv1, isoform at87 [Betula pendula]	4006963
256	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen Betv1, isoform at5 [Betula pendula]	4006965
257	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen Betv1, isoform at7 [Betula pendula]	4006967
258	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen, Betv1 [Betula pendula]	4376216
259	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen, Betv1 [Betula pendula]	4376219
260	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen, Betv1 [Betula pendula]	4376220
261	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen, Betv1 [Betula pendula]	4376221
262	<i>Betula pendula</i>	European white birch	Bet v 1	pollen allergen, Betv1 [Betula pendula]	4376222
263	<i>Betula pendula</i>	European white birch	Bet v 1 b1	isoallergen bet v 1 b1 [Betula pendula]	4590392
264	<i>Betula pendula</i>	European white birch	Bet v 1 b2	isoallergen Bet v 1 b2 [Betula pendula]	4590394
265	<i>Betula pendula</i>	European white birch	bet v 1 b3	isoallergen bet v 1 b3 [Betula pendula]	4590396
266	<i>Betula pendula</i>	European white birch	Bet v 6.0102	allergenic isoflavone reductase-like protein Bet v 6.0102 [Betula pendula]	10764491
267	<i>Betula pendula</i>	European white birch	Bet v 1	Chain A, Birch Pollen Allergen Bet V 1 Mutant N28t, K32q, E45s, P108g	11514622
268	<i>Betula pendula</i>	European white birch	Bet v 4	Polcalcin Bet v 4 (Calcium-binding pollen allergen Bet v 4)	14423850
269	<i>Betula pendula</i>	European white birch	Bet v 7	peptidylprolyl isomerase (cyclophilin) [Betula pendula]	21886603
270	<i>Betula pendula</i>	European white birch	Bet v 1x	allergen Bet v 1x [Betula pendula]	30908931
271	<i>Betula pendula</i>	European white birch	Bet v 1	Chain A, Birch Pollen Allergen Bet V 1 Mutant E45s	38492423
272	<i>Betula pendula</i>	European white birch	Unassigned	Chain A, Birch Pollen Profilin	157830684
273	<i>Betula pendula</i>	European white birch	Bet v 1	Chain A, Birch Pollen Allergen Bet V 1	159162097
274	<i>Betula platyphylla</i>	Japanese white birch	Unassigned	Bet vl jap1 [Betula platyphylla]	12583681
275	<i>Betula platyphylla</i>	Japanese white birch	Unassigned	Bet vl jap2 [Betula platyphylla]	12583683

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
276	<i>Betula platyphylla</i>	Japanese white birch	Unassigned	Bet vl jap3 [Betula platyphylla]	12583685
277	<i>Betula</i> sp.	Birch	Unassigned	isoallergen (N-terminal) [birch, pollen, Peptide Partial, 51 aa]	298736
278	<i>Betula</i> sp.	Birch	Unassigned	isoallergen (N-terminal) [birch, pollen, Peptide Partial, 51 aa]	298737
279	<i>Blattella germanica</i>	German cockroach	Unassigned	36 kda allergen {peptide 143-111} [Blattella germanica=German cockroaches, Peptide Partial, 20 aa]	544618
280	<i>Blattella germanica</i>	German cockroach	Unassigned	36 kda allergen {peptide 143-115} [Blattella germanica=German cockroaches, Peptide Partial, 25 aa]	544619
281	<i>Blattella germanica</i>	German cockroach	Bla g 4	allergen Bla g 4	1166573
282	<i>Blattella germanica</i>	German cockroach	Bla g 2	Aspartic protease Bla g 2 precursor (Allergen Bla g II)	1703445
283	<i>Blattella germanica</i>	German cockroach	Bla g 1.02	major allergen Bla g 1.02 [Blattella germanica]	4240395
284	<i>Blattella germanica</i>	German cockroach	Bla g 1.0101	major allergen Bla g 1.0101 [Blattella germanica]	4572592
285	<i>Blattella germanica</i>	German cockroach	Unassigned	Glutathione S-transferase (GST class-sigma) (Major allergen Bla g 5)	6225491
286	<i>Blattella germanica</i>	German cockroach	Unassigned	tropomyosin [Blattella germanica]	8101069
287	<i>Blattella germanica</i>	German cockroach	Unassigned	Chain A, The Structure Of Mutant (N93q) Of Bla G 2	62738637
288	<i>Blattella germanica</i>	German cockroach	Unassigned	Bla g 4 allergen [Blattella germanica]	144952778
289	<i>Blattella germanica</i>	German cockroach	Unassigned	Bla g 5 variant allergen [Blattella germanica]	144952780
290	<i>Blattella germanica</i>	German cockroach	Unassigned	Bla g 2 allergen variant [Blattella germanica]	145105726
291	<i>Blattella germanica</i>	German cockroach	Unassigned	Bla g 4 allergen [Blattella germanica]	212675308
292	<i>Blomia tropicalis</i>	Mite	Unassigned	Blo t 1.02 [Blomia tropicalis] Manual Entry	none
293	<i>Blomia tropicalis</i>	Mite	Blo t 5	major IgE-binding protein Blo t 5 [Blomia tropicalis]	4204917

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
294	<i>Blomia tropicalis</i>	Mite	Blo t 1	cysteine protease precursor [Blomia tropicalis]	14276828
295	<i>Blomia tropicalis</i>	Mite	Unassigned	Fatty acid-binding protein (Allergen Blo t 13) (Bt6)	14423698
296	<i>Blomia tropicalis</i>	Mite	Blo t 11	paramyosin allergen [Blomia tropicalis]	21954740
297	<i>Blomia tropicalis</i>	Mite	Unassigned	trypsin [Blomia tropicalis]	25989482
298	<i>Blomia tropicalis</i>	Mite	Unassigned	Blo t 1 allergen [Blomia tropicalis]	33667928
299	<i>Blomia tropicalis</i>	Mite	Unassigned	Blo t 3 allergen [Blomia tropicalis]	33667930
300	<i>Blomia tropicalis</i>	Mite	Unassigned	Blo t 13 allergen [Blomia tropicalis]	37958153
301	<i>Blomia tropicalis</i>	Mite	Unassigned	Blo t 21 allergen [Blomia tropicalis]	111120420
302	<i>Blomia tropicalis</i>	Mite	Unassigned	Blo t 21 allergen [Blomia tropicalis]	111120424
303	<i>Blomia tropicalis</i>	Mite	Unassigned	Blo t 21 allergen [Blomia tropicalis]	111120428
304	<i>Blomia tropicalis</i>	Mite	Unassigned	Blo t 21 allergen [Blomia tropicalis]	111120432
305	<i>Blomia tropicalis</i>	Mite	Unassigned	Blo t 5 allergen [Blomia tropicalis]	111120436
306	<i>Blomia tropicalis</i>	Mite	Unassigned	Blo t 5 allergen [Blomia tropicalis]	111120450
307	<i>Blomia tropicalis</i>	Mite	Unassigned	Blo t 21 allergen [Blomia tropicalis]	111494253
308	<i>Blomia tropicalis</i>	Mite	Unassigned	group 10 allergen Blo t 10 [Blomia tropicalis]	156938889
309	<i>Blomia tropicalis</i>	Mite	Unassigned	Chain A, Nmr Solution Structure Of Blo T 5, A Major Mite Allergen From Blomia Tropicalis	160285626
310	<i>Bombus terrestris</i>	Bumblebee	Unassigned	Phospholipase A2 (Phosphatidylcholine 2-acylhydrolase) (Allergen Bom t 1)	14423832
311	<i>Bombyx mori</i>	Moth	Unassigned	arginine kinase [Bombyx mori]	204324083
312	<i>Bos taurus</i>	Bovine	Bos d 5	beta-lactoglobulin [Bos taurus]	520
313	<i>Bos taurus</i>	Bovine	Unassigned	Beta-lactoglobulin precursor (Beta-LG) (Allergen Bos d 5)	125910
314	<i>Bos taurus</i>	Bovine	Unassigned	Alpha-lactalbumin precursor (Lactose synthase B protein) (Allergen Bos d 4)	125996
315	<i>Bos taurus</i>	Bovine	Unassigned	alpha-s1-casein	162650
316	<i>Bos taurus</i>	Bovine	Unassigned	beta-lactoglobulin	162750
317	<i>Bos taurus</i>	Bovine	Unassigned	alpha-s1-casein precursor	162792

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
318	<i>Bos taurus</i>	Bovine	Unassigned	alpha-S1-casein	162794
319	<i>Bos taurus</i>	Bovine	Unassigned	beta-casein precursor	162797
320	<i>Bos taurus</i>	Bovine	Unassigned	beta-casein	162805
321	<i>Bos taurus</i>	Bovine	Unassigned	kappa-casein precursor	162811
322	<i>Bos taurus</i>	Bovine	Unassigned	alpha-s1-casein	162927
323	<i>Bos taurus</i>	Bovine	Unassigned	alpha-s2-like casein precursor	162929
324	<i>Bos taurus</i>	Bovine	Unassigned	beta-casein precursor	162931
325	<i>Bos taurus</i>	Bovine	Bos d 4	alpha-lactalbumin [Bos taurus]	295774
326	<i>Bos taurus</i>	Bovine	Unassigned	beta-casein A3 [Bos taurus]	459292
327	<i>Bos taurus</i>	Bovine	Unassigned	kappa-casein [Bos taurus]	1228078
328	<i>Bos taurus</i>	Bovine	Unassigned	RecName: Full=Serum albumin; AltName: Full=BSA; AltName: Allergen=Bos d 6; Flags: Precursor	1351907
329	<i>Bos taurus</i>	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
330	<i>Bos taurus</i>	Bovine	Unassigned	Allergen Bos d 2 precursor (Dander major allergen BDA20) (Dermal allergen BDA20)	2497701
331	<i>Bos taurus</i>	Bovine	Unassigned	bovine serum albumin [Bos taurus]	3336842
332	<i>Bos taurus</i>	Bovine	Unassigned	lactotransferrin [Bos taurus]	30794292
333	<i>Bos taurus</i>	Bovine	Unassigned	alpha S1 casein [Bos taurus]	159793197
334	<i>Bos taurus</i>	Bovine	Unassigned	alpha S1 casein [Bos taurus]	159793201
335	<i>Bos taurus</i>	Bovine	Unassigned	alpha S1 casein [Bos taurus]	159793217
336	<i>Bos taurus</i>	Bovine	Unassigned	major allergen beta-lactoglobulin [Bos taurus]	195957138
337	<i>Brassica juncea</i>	Mustard	Bra j 1	Allergen Bra j 1-E (Bra j 1) [Contains: Allergen Bra j 1-E small chain; Allergen Bra j 1-E large chain]	32363444
338	<i>Brassica napus</i>	Rape	Unassigned	pollen allergen group II (clone 42) - rape	2129801

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
339	<i>Brassica napus</i>	Rape	Unassigned	pollen allergen group II (clone 44) - rape	2129802
340	<i>Brassica napus</i>	Rape	Unassigned	recombinant Ib pronapin precursor [Brassica napus]	26985163
341	<i>Brassica napus</i>	Rape	Unassigned	Polcalcin Bra n 1 (Calcium-binding pollen allergen Bra n 1)	59800143
342	<i>Brassica napus</i>	Rape	Unassigned	Polcalcin Bra n 2 (Calcium-binding pollen allergen Bra n 2)	59800145
343	<i>Brassica napus</i>	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
344	<i>Brassica oleracea</i>	Cabbage	Unassigned	LTP Bra o 3 [Brassica oleracea] Manual Entry	none
345	<i>Brassica rapa</i>	Turnip	Unassigned	pollen allergen group II (clone 4) - turnip (fragment)	2129805
346	<i>Brassica rapa</i> subsp. <i>rapa</i>	Turnip	Unassigned	Chitin-binding allergen Bra r 2	32363456
347	<i>Brassica rapa</i> subsp. <i>rapa</i>	Turnip	Unassigned	Polcalcin Bra r 1 (Calcium-binding pollen allergen Bra r 1)	59800144
348	<i>Brassica rapa</i> subsp. <i>rapa</i>	Turnip	Unassigned	Polcalcin Bra r 2 (Calcium-binding pollen allergen Bra r 2)	59800146
349	<i>Candida albicans</i>	Yeast	Unassigned	Enolase 1 (2-phosphoglycerate dehydratase) (2-phospho-D-glycerate hydro-lyase)	232054
350	<i>Candida albicans</i>	Yeast	Cand a 3	29 kDa IgE-binding protein [Candida albicans]	37548637
351	<i>Canis familiaris</i>	Dog	Can f 3	albumin [Canis familiaris]	633938
352	<i>Canis familiaris</i>	Dog	Can f 1	Major allergen Can f 1 precursor (Allergen Dog 1)	3121745
353	<i>Canis familiaris</i>	Dog	Can f 2	Minor allergen Can f 2 precursor (Allergen Dog 2)	3121746
354	<i>Canis familiaris</i>	Dog	Can f 3	albumin [Canis familiaris]	3319897
355	<i>Canis familiaris</i>	Dog	Can f 3	albumin [Canis familiaris]	6687188
356	<i>Canis familiaris</i>	Dog	Can f 2	precursor Can f II [Canis familiaris]	29292272
357	<i>Canis familiaris</i>	Dog	Can f 2	precursor Can f II [Canis familiaris]	29292274

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
358	<i>Capsicum annuum</i>	Bell pepper	Cap a 2	profilin [Capsicum annuum]	16555785
359	<i>Carica papaya</i>	Papaya	Unassigned	Papain precursor (Papaya proteinase I) (PPI) (Allergen Car p 1)	129614
360	<i>Carpinus betulus</i>	Hornbeam	Unassigned	Car b I=major allergen [Carpinus betulus=hornbeam trees, pollen, Peptide Partial, 40 aa]	239735
361	<i>Carpinus betulus</i>	Hornbeam	Car b 1	Car b I [Carpinus betulus]	402745
362	<i>Carpinus betulus</i>	Hornbeam	Car b 1	Major pollen allergen Car b 1 isoforms 1A and 1B (Car B I)	730048
363	<i>Carpinus betulus</i>	Hornbeam	Car b 1	Major pollen allergen Car b 1 isoform 2 (Car b I)	730049
364	<i>Carpinus betulus</i>	Hornbeam	Car b 1.0103	pollen allergen Car b 1 [Carpinus betulus]	1545875
365	<i>Carpinus betulus</i>	Hornbeam	Car b 1.0104	pollen allergen Car b 1 [Carpinus betulus]	1545877
366	<i>Carpinus betulus</i>	Hornbeam	Car b 1.0104	pollen allergen Car b 1 [Carpinus betulus]	1545879
367	<i>Carpinus betulus</i>	Hornbeam	Car b 1.0105	pollen allergen Car b 1 [Carpinus betulus]	1545887
368	<i>Carpinus betulus</i>	Hornbeam	Car b 1	pollen allergen Car b 1 [Carpinus betulus]	1545891
369	<i>Carpinus betulus</i>	Hornbeam	Car b 1.0108	pollen allergen Car b 1 [Carpinus betulus]	1545893
370	<i>Carpinus betulus</i>	Hornbeam	Car b 1.0301	pollen allergen Car b 1 [Carpinus betulus]	1545895
371	<i>Carpinus betulus</i>	Hornbeam	Car b 1.0302	pollen allergen Car b 1 [Carpinus betulus]	1545897
372	<i>Carpinus betulus</i>	Hornbeam	Unassigned	pollen allergen Car b 1 isoform [Carpinus betulus]	167472837
373	<i>Carpinus betulus</i>	Hornbeam	Unassigned	pollen allergen Car b 1 isoform [Carpinus betulus]	167472839
374	<i>Carpinus betulus</i>	Hornbeam	Unassigned	pollen allergen Car b 1 isoform [Carpinus betulus]	167472841
375	<i>Carpinus betulus</i>	Hornbeam	Unassigned	pollen allergen Car b 1 isoform [Carpinus betulus]	167472843
376	<i>Carpinus betulus</i>	Hornbeam	Unassigned	pollen allergen Car b 1 isoform [Carpinus betulus]	167472845
377	<i>Castanea sativa</i>	European chestnut	Cas s 5	chitinase Ib [Castanea sativa]	1359600
378	<i>Castanea sativa</i>	European chestnut	Cas s 1	ypr10 [Castanea sativa]	16555781

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
379	<i>Castanea sativa</i>	European chestnut	Unassigned	Cas s 1 pollen allergen [Castanea sativa]	212291464
380	<i>Castanea sativa</i>	European chestnut	Unassigned	Cas s 1 pollen allergen [Castanea sativa]	212291466
381	<i>Castanea sativa</i>	European chestnut	Unassigned	Cas s 1 pollen allergen [Castanea sativa]	212291468
382	<i>Cavia porcellus</i>	Domestic guinea pig	Cav p 2	Major allergen Cav p 2	32363133
383	<i>Cavia porcellus</i>	Domestic guinea pig	Cav p 1	Major urinary protein (MUP) (Allergen Cav p 1)	32469617
384	<i>Chamaecyparis obtusa</i>	Japanese cypress	Unassigned	Major pollen allergen Cha o 1 precursor	9087163
385	<i>Chamaecyparis obtusa</i>	Japanese cypress	Unassigned	Polygalacturonase precursor (PG) (Pectinase) (Major pollen allergen Cha o 2)	47606004
386	<i>Chamaecyparis obtusa</i>	Japanese cypress	Unassigned	pollen allergen [Chamaecyparis obtusa]	114841683
387	<i>Charybdis feriatus</i>	Crab	Cha f 1	Tropomyosin (Allergen Cha f 1) (Cha f I)	14285800
388	<i>Chenopodium album</i>	Pigweed	Che a 2	pollen allergen Che a 2 [Chenopodium album]	29465666
389	<i>Chenopodium album</i>	Pigweed	Che a 3	pollen allergen Che a 3 [Chenopodium album]	29465668
390	<i>Chenopodium album</i>	Pigweed	Unassigned	Pollen allergen Che a 1 precursor	47605504
391	<i>Chionoecetes opilio</i>	Snow crab	Unassigned	tropomyosin slow-tonic isoform [Chionoecetes opilio]	125995167
392	<i>Chironomus kiiensis</i>	Midge	Unassigned	Tropomyosin (Allergen Chi k 10)	42559556
393	<i>Chironomus thummi thummi</i>	Midge	Chi t 1.01	Globin CTT-III precursor (Erythrocrucorin III)	121219
394	<i>Chironomus thummi thummi</i>	Midge	Chi t 1.02	Globin CTT-IV precursor	121227
395	<i>Chironomus thummi thummi</i>	Midge	Chi t 8	Globin CTT-VIII	121237
396	<i>Chironomus thummi thummi</i>	Midge	Chi t 7	Globin CTT-VIIB-3 precursor	121244
397	<i>Chironomus thummi thummi</i>	Midge	Chi t 7	Globin CTT-VIIB-6 precursor	121248
398	<i>Chironomus thummi thummi</i>	Midge	Chi t 7	Globin CTT-VIIB-7 precursor	121249
399	<i>Chironomus thummi thummi</i>	Midge	Chi t 4	Globin CTT-IIIA	121256
400	<i>Chironomus thummi thummi</i>	Midge	Chi t 9	Globin CTT-X	121259
401	<i>Chironomus thummi thummi</i>	Midge	Chi t 3	Globin CTT-II beta precursor	1707908

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
402	<i>Chironomus thummi thummi</i>	Midge	Chi t 2	Globin CTT-I/CTT-IA precursor (Erythrocrucorin)	2506460
403	<i>Chironomus thummi thummi</i>	Midge	Chi t 5	Globin CTT-VI precursor	2506461
404	<i>Chironomus thummi thummi</i>	Midge	Chi t 7	Globin CTT-VIIB-4 precursor (Erythrocrucorin)	56405052
405	<i>Chironomus thummi thummi</i>	Midge	Chi t 7	Globin CTT-VIIB-5/CTT-VIIB-9 precursor	56405054
406	<i>Citrus limon</i>	Lemon	Unassigned	Nonspecific lipid-transfer protein (LTP) (Allergen Cit l 3)	52783176
407	<i>Citrus sinensis</i>	Navel orange	Cit s 3	lipid transfer protein [Citrus sinensis]	50199132
408	<i>Citrus sinensis</i>	Navel orange	Unassigned	Germin-like protein (Allergen Cit s 1)	52782810
409	<i>Citrus sinensis</i>	Navel orange	Unassigned	Nonspecific lipid-transfer protein (LTP) (Allergen Cit s 3.0101)	52783177
410	<i>Citrus sinensis</i>	Navel orange	Unassigned	Profilin (Allergen Cit s 2)	54036219
411	<i>Citrus sinensis</i>	Navel orange	Unassigned	profilin [Citrus sinensis]	56000996
412	<i>Cochliobolus lunatus</i>	Fungus	Cur l 2.01	enolase [Curvularia lunata]	14585753
413	<i>Coprinus comatus</i>	Shaggy mane	Cop c 1	Cop c1 allergen [Coprinus comatus]	4538529
414	<i>Corylus avellana</i>	European hazelnut	Cor a 1.0103	major allergen [Corylus avellana]	22684
415	<i>Corylus avellana</i>	European hazelnut	Cor a 1.0104	major allergen [Corylus avellana]	22686
416	<i>Corylus avellana</i>	European hazelnut	Cor a 1.0102	major allergen [Corylus avellana]	22690
417	<i>Corylus avellana</i>	European hazelnut	Cor a l	Major pollen allergen Cor a 1 isoforms 5, 6, 11 and 16 (Cor a l)	584968
418	<i>Corylus avellana</i>	European hazelnut	Cor a 1.0201	major allergen Cor a 1 [Corylus avellana]	1321731
419	<i>Corylus avellana</i>	European hazelnut	Cor a 1.0301	major allergen Cor a 1 [Corylus avellana]	1321733
420	<i>Corylus avellana</i>	European hazelnut	Cor a 1.0401	major allergen Cor a 1.0401 [Corylus avellana]	5726304
421	<i>Corylus avellana</i>	European hazelnut	Cor a 10	putative luminal binding protein [Corylus avellana]	10944737
422	<i>Corylus avellana</i>	European hazelnut	Cor a 1.0402	major allergen variant Cor a 1.0402 [Corylus avellana]	11762102
423	<i>Corylus avellana</i>	European hazelnut	Cor a 1.0403	major allergen variant Cor a 1.0403 [Corylus avellana]	11762104

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
424	<i>Corylus avellana</i>	European hazelnut	Cor a 1.0404	major allergen variant Cor a 1.0404 [ <i>Corylus avellana</i> ]	11762106
425	<i>Corylus avellana</i>	European hazelnut	Cor a 2	minor allergen hazelnut profilin [ <i>Corylus avellana</i> ]	12659206
426	<i>Corylus avellana</i>	European hazelnut	Cor a 2	minor allergen hazelnut profilin [ <i>Corylus avellana</i> ]	12659208
427	<i>Corylus avellana</i>	European hazelnut	Cor a 8	lipid transfer protein precursor [ <i>Corylus avellana</i> ]	13507262
428	<i>Corylus avellana</i>	European hazelnut	Cor a 9	11S globulin-like protein [ <i>Corylus avellana</i> ]	18479082
429	<i>Corylus avellana</i>	European hazelnut	Cor a 11	48-kDa glycoprotein precursor [ <i>Corylus avellana</i> ]	19338630
430	<i>Corylus avellana</i>	European hazelnut	Unassigned	oleosin [ <i>Corylus avellana</i> ]	29170509
431	<i>Crassostrea gigas</i>	American oyster	Unassigned	tropomyosin [ <i>Crassostrea gigas</i> ]	15419048
432	<i>Crassostrea gigas</i>	American oyster	Unassigned	tropomyosin [ <i>Crassostrea gigas</i> ]	219806594
433	<i>Crassostrea virginica</i>	Eastern oyster	Unassigned	tropomyosin [ <i>Crassostrea virginica</i> ]	3668408
434	<i>Crocus sativus</i>	Saffron crocus	Unassigned	profilin [ <i>Crocus sativus</i> ]	58700651
435	<i>Cryptomeria japonica</i>	Japanese cedar	Unassigned	Cry j IB precursor [ <i>Cryptomeria japonica</i> ]	493634
436	<i>Cryptomeria japonica</i>	Japanese cedar	Cry j 2	Polygalacturonase precursor (PG) (Pectinase) (Major pollen allergen Cry j 2) (Cry j II)	1171004
437	<i>Cryptomeria japonica</i>	Japanese cedar	Cry j 1	Sugi basic protein precursor (SBP) (Major allergen Cry j 1) (Cry j I)	1173367
438	<i>Cryptomeria japonica</i>	Japanese cedar	Cry j 1	Cry j 1 precursor [ <i>Cryptomeria japonica</i> ]	19570315
439	<i>Cryptomeria japonica</i>	Japanese cedar	Unassigned	isoflavone reductase-like protein CJP-6 [ <i>Cryptomeria japonica</i> ]	19847822
440	<i>Cryptomeria japonica</i>	Japanese cedar	Cry j 2	allergen Cry j 2 [ <i>Cryptomeria japonica</i> ]	24898904
441	<i>Cryptomeria japonica</i>	Japanese cedar	Cry j 2	allergen Cry j 2 [ <i>Cryptomeria japonica</i> ]	24898906
442	<i>Cryptomeria japonica</i>	Japanese cedar	Cry j 2	allergen Cry j 2 [ <i>Cryptomeria japonica</i> ]	24898908
443	<i>Cryptomeria japonica</i>	Japanese cedar	Unassigned	class IV chitinase [ <i>Cryptomeria japonica</i> ]	56550550
444	<i>Cryptomeria japonica</i>	Japanese cedar	Unassigned	pollen allergen [ <i>Cryptomeria japonica</i> ]	114841607

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
445	<i>Cryptomeria japonica</i>	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841617
446	<i>Cryptomeria japonica</i>	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841629
447	<i>Cryptomeria japonica</i>	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841635
448	<i>Cryptomeria japonica</i>	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841641
449	<i>Cryptomeria japonica</i>	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841653
450	<i>Cryptomeria japonica</i>	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841657
451	<i>Cryptomeria japonica</i>	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841663
452	<i>Cryptomeria japonica</i>	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841665
453	<i>Cryptomeria japonica</i>	Japanese cedar	Unassigned	pollen allergen [Cryptomeria japonica]	114841671
454	<i>Cryptomeria japonica</i>	Japanese cedar	Unassigned	allergen Cry j 2 [Cryptomeria japonica]	123299282
455	<i>Cryptomeria japonica</i>	Japanese cedar	Unassigned	thaumatin-like protein [Cryptomeria japonica]	139002766
456	<i>Cucumis melo</i>	Muskmelon	Cuc m 2	profilin [Cucumis melo]	31559374
457	<i>Cucumis melo</i>	Muskmelon	Cuc m 3	[Segment 1 of 3] Pathogenesis-related protein (PR-1) (Allergen Cuc m 3)	46396596
458	<i>Cucumis melo</i>	Muskmelon	Cuc m 3	[Segment 2 of 3] Pathogenesis-related protein (PR-1) (Allergen Cuc m 3)	46396597
459	<i>Cucumis melo</i>	Muskmelon	Cuc m 3	[Segment 3 of 3] Pathogenesis-related protein (PR-1) (Allergen Cuc m 3)	46396598
460	<i>Cucumis melo</i>	Muskmelon	Cuc m 2	profilin [Cucumis melo]	58263793
461	<i>Cucumis melo</i>	Muskmelon	Unassigned	Cucumisin precursor (Allergen Cuc m 1)	71153243
462	<i>Cucumis melo</i> var. <i>inodorus</i>	Honeydew melon	Unassigned	pathogen-related protein 1 [Cucumis melo var. <i>inodorus</i> ]	171464770
463	<i>Cucumis melo</i> var. <i>reticulatus</i>	Netted muskmelon	Cuc m 2	profilin [Cucumis melo var. <i>reticulatus</i> ]	57021110
464	<i>Cupressus arizonica</i>	Arizona Cypress	Unassigned	Major pollen allergen Cup a 1	9087167
465	<i>Cupressus arizonica</i>	Arizona Cypress	Unassigned	Cup a 3 protein [Cupressus arizonica]	9929163
466	<i>Cupressus arizonica</i>	Arizona Cypress	Cup a 1	putative allergen Cup a 1 [Cupressus arizonica]	19069497
467	<i>Cupressus arizonica</i>	Arizona Cypress	Unassigned	major allergen Cup a 1 [Cupressus arizonica]	118197955
468	<i>Cupressus sempervirens</i>	Mediterranean Cypress	Cup s 1.0101	Cup s 1 pollen allergen precursor [Cupressus sempervirens]	8101711

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
469	<i>Cupressus sempervirens</i>	Mediterranean Cypress	Cup s 1.0102	Cup s 1 pollen allergen precursor [Cupressus sempervirens]	8101713
470	<i>Cupressus sempervirens</i>	Mediterranean Cypress	Cup s 1.0103	Cup s 1 pollen allergen precursor [Cupressus sempervirens]	8101715
471	<i>Cupressus sempervirens</i>	Mediterranean Cypress	Cup s 1.0104	Cup s 1 pollen allergen precursor [Cupressus sempervirens]	8101717
472	<i>Cupressus sempervirens</i>	Mediterranean Cypress	Cup s 1.0105	Cup s 1 pollen allergen precursor [Cupressus sempervirens]	8101719
473	<i>Cupressus sempervirens</i>	Mediterranean Cypress	Unassigned	PR5 allergen Cup s 3.2 precursor [Cupressus sempervirens]	38456228
474	<i>Cupressus sempervirens</i>	Mediterranean Cypress	Unassigned	PR5 allergen Cup s 3.3 precursor [Cupressus sempervirens]	38456230
475	<i>Cynodon dactylon</i>	Bermuda grass	Cyn d 1	major allergen Cyn d l=34 kda polypeptide {N-terminal} [Cynodon dactylon=Bermuda grass, pollen, Peptide Partial, 25 aa]	451274
476	<i>Cynodon dactylon</i>	Bermuda grass	Cyn d 1	major allergen Cyn d l=29 kda polypeptide {N-terminal} [Cynodon dactylon=Bermuda grass, pollen, Peptide Partial, 38 aa]	451275
477	<i>Cynodon dactylon</i>	Bermuda grass	Cyn d 1	Cyn d lb isoallergen {N-terminal} [Cynodon dactylon=Bermuda grass, pollen, Peptide Partial, 34 aa]	691726
478	<i>Cynodon dactylon</i>	Bermuda grass	Unassigned	B1 protein allergen [Cynodon dactylon]	1247373
479	<i>Cynodon dactylon</i>	Bermuda grass	Unassigned	B4 protein allergen [Cynodon dactylon]	1247375
480	<i>Cynodon dactylon</i>	Bermuda grass	Cyn d 7	calcium-binding pollen allergen [Cynodon dactylon]	1871507
481	<i>Cynodon dactylon</i>	Bermuda grass	Cyn d 12	profilin 1 [Cynodon dactylon]	2154730
482	<i>Cynodon dactylon</i>	Bermuda grass	Cyn d 1.0204	acidic Cyn d 1 isoallergen isoform 1 precursor [Cynodon dactylon]	10314021
483	<i>Cynodon dactylon</i>	Bermuda grass	Cyn d 1	Major pollen allergen Cyn d 1	14423757
484	<i>Cynodon dactylon</i>	Bermuda grass	Cyn d 1.0201	acidic allergen Cyn d 1 precursor [Cynodon dactylon]	15384338

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
485	<i>Cynodon dactylon</i>	Bermuda grass	Cyn d 1.0202	acidic Cyn d 1 isoallergen isoform 2 precursor [Cynodon dactylon]	16076693
486	<i>Cynodon dactylon</i>	Bermuda grass	Cyn d 1	acidic Cyn d 1 isoallergen isoform 3 precursor [Cynodon dactylon]	16076695
487	<i>Cynodon dactylon</i>	Bermuda grass	Cyn d 1.0203	acidic Cyn d 1 isoallergen isoform 4 precursor [Cynodon dactylon]	16076697
488	<i>Cyprinus carpio</i>	Carp	Unassigned	parvalbumin [Cyprinus carpio]	17977825
489	<i>Cyprinus carpio</i>	Carp	Unassigned	parvalbumin [Cyprinus carpio]	17977827
490	<i>Dactylis glomerata</i>	Orchard grass	Dac g 2	allergen Dac g II	1093120
491	<i>Dactylis glomerata</i>	Orchard grass	Dac g 2	pollen allergen (group II) [Dactylis glomerata]	4007040
492	<i>Dactylis glomerata</i>	Orchard grass	Dac g 5	group 5 allergen precursor [Dactylis glomerata]	14423124
493	<i>Dactylis glomerata</i>	Orchard grass	Unassigned	Pollen allergen Dac g 3 (Dac g III)	14423759
494	<i>Dactylis glomerata</i>	Orchard grass	Dac g 5	unnamed protein product [Dactylis glomerata]	18093971
495	<i>Dactylis glomerata</i>	Orchard grass	Dac g 1	unnamed protein product [Dactylis glomerata]	18093991
496	<i>Dactylis glomerata</i>	Orchard grass	Unassigned	[Segment 1 of 4] Major pollen allergen Dac g 4	32363464
497	<i>Dactylis glomerata</i>	Orchard grass	Unassigned	[Segment 2 of 4] Major pollen allergen Dac g 4	32363465
498	<i>Dactylis glomerata</i>	Orchard grass	Unassigned	[Segment 3 of 4] Major pollen allergen Dac g 4	32363466
499	<i>Dactylis glomerata</i>	Orchard grass	Unassigned	[Segment 4 of 4] Major pollen allergen Dac g 4	32363467
500	<i>Dactylis glomerata</i>	Orchard grass	Unassigned	group 1 allergen Dac g 1.01 precursor [Dactylis glomerata]	33149333
501	<i>Daucus carota</i>	Carrot	Dau c 1.0101	pathogenesis-related protein	1335877
502	<i>Daucus carota</i>	Carrot	Dau c 1.0102	cr16 [Daucus carota]	1663522
503	<i>Daucus carota</i>	Carrot	Dau c 1.0103	major allergen [Daucus carota]	2154732
504	<i>Daucus carota</i>	Carrot	Dau c 1.0104	major allergen [Daucus carota]	2154734
505	<i>Daucus carota</i>	Carrot	Unassigned	Major allergen Dau c 1 (CR16) (Pathogenesis-related protein Gea20)	8928058
506	<i>Daucus carota</i>	Carrot	Dau c 1.0201	major allergen isoform Dau c 1.0201 [Daucus carota]	18652047

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
507	<i>Daucus carota</i>	Carrot	Unassigned	pathogenesis-related protein-like protein 1 [Daucus carota]	19912791
508	<i>Daucus carota</i>	Carrot	Unassigned	RecName: Full=Profilin; AltName: Full=Minor pollen allergen Dau c 4; AltName: Allergen=Dau c 4	47606043
509	<i>Davidiella tassiana</i>	Fungus	Cla h 6	enolase; phosphopyruvate hydratase [Davidiella tassiana]	467660
510	<i>Davidiella tassiana</i>	Fungus	Unassigned	Heat shock 70 kDa protein (Allergen Cla h 4) (Cla h IV)	729764
511	<i>Davidiella tassiana</i>	Fungus	Cla h 7	Minor allergen Cla h 5 (Cla h V)	1168970
512	<i>Davidiella tassiana</i>	Fungus	Cla h 5	60S acidic ribosomal protein P2 (Allergen Cla h 3) (Cla h III)	1173074
513	<i>Davidiella tassiana</i>	Fungus	Cla h 6	Enolase (2-phosphoglycerate dehydratase) (2-phospho-D-glycerate hydro-lyase) (Allergen Cla h 6) (Cla h VI)	6015094
514	<i>Davidiella tassiana</i>	Fungus	Cla h 5	60S acidic ribosomal protein P2 (Minor allergen Cla h 4) (Cla h IV)	21542440
515	<i>Davidiella tassiana</i>	Fungus	Unassigned	putative nuclear transport factor 2 [Davidiella tassiana]	21748151
516	<i>Davidiella tassiana</i>	Fungus	Unassigned	hydrophobin [Davidiella tassiana]	22796153
517	<i>Davidiella tassiana</i>	Fungus	Unassigned	vacuolar serine protease [Davidiella tassiana]	60116876
518	<i>Davidiella tassiana</i>	Fungus	Unassigned	Probable NADP-dependent mannitol dehydrogenase (MtDH) (Mannitol 2-dehydrogenase [NADP+]) (Allergen Cla h 8)	85701146
519	<i>Davidiella tassiana</i>	Fungus	Unassigned	Aldehyde dehydrogenase (ALDDH) (Allergen Cla h 10) (Cla h 3) (Cla h III)	108935817
520	<i>Dermatophagoides farinae</i>	House dust mite	Der f 2	mite allergen Der f II precursor [Dermatophagoides farinae]	217308

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
521	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	DF5=allergen {N-terminal} [Dermatophagoides farinae=mites, Peptide Partial, 20 aa]	404371
522	<i>Dermatophagoides farinae</i>	House dust mite	Der f 2	Der f II [Dermatophagoides farinae]	546852
523	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Allergen Mag	729979
524	<i>Dermatophagoides farinae</i>	House dust mite	Der f 1	Major mite fecal allergen Der f 1 precursor (Der f I)	730035
525	<i>Dermatophagoides farinae</i>	House dust mite	Der f 3	Der f 3 mite allergen	1314736
526	<i>Dermatophagoides farinae</i>	House dust mite	Der f 14	Mag3 [Dermatophagoides farinae]	1545803
527	<i>Dermatophagoides farinae</i>	House dust mite	Der f 7	Mite allergen Der f 7 precursor (Der f VII)	2498299
528	<i>Dermatophagoides farinae</i>	House dust mite	Der f 3	Mite allergen Der f 3 precursor (Der f III)	2507248
529	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Mite allergen Der f 6 precursor (Der f VI) (DF5)	14424450
530	<i>Dermatophagoides farinae</i>	House dust mite	Der f 2	major Der f 2 isoform [Dermatophagoides farinae]	17978844
531	<i>Dermatophagoides farinae</i>	House dust mite	Der f 16	gelsolin-like allergen Der f 16 [Dermatophagoides farinae]	21591547
532	<i>Dermatophagoides farinae</i>	House dust mite	Der f 1	Der f 1 allergen preproenzyme [Dermatophagoides farinae]	27530349
533	<i>Dermatophagoides farinae</i>	House dust mite	Der f 18	60 kDa allergen Der f 18p [Dermatophagoides farinae]	27550039
534	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Der f 7 allergen [Dermatophagoides farinae]	37958165
535	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Paramyosin (Allergen Der f 11) (Antigen Df642)	42559514
536	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Tropomyosin (Allergen Der f 10) (Mag44)	42559584
537	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	mite allergen Der f 2 [Dermatophagoides farinae]	55859466
538	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Der f 2 [Dermatophagoides farinae]	55859468

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
539	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	mite allergen Der f 2 [Dermatophagoides farinae]	55859470
540	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	group 2 allergen [Dermatophagoides farinae]	56378069
541	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Der f 5.02 allergen [Dermatophagoides farinae]	60679572
542	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Der f 1 allergen precursor [Dermatophagoides farinae]	76097507
543	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Der f 2 allergen precursor [Dermatophagoides farinae]	76097511
544	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Chain A, Solution Structure Of Der F 13, Group 13 Allergen From House Dust Mites	99031759
545	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	group 21 allergen [Dermatophagoides farinae]	140089314
546	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	group 21 allergen [Dermatophagoides farinae]	140089316
547	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	group 21 allergen [Dermatophagoides farinae]	140089320
548	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	group 21 allergen [Dermatophagoides farinae]	140089322
549	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	group 21 allergen [Dermatophagoides farinae]	140089324
550	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	group 21 allergen [Dermatophagoides farinae]	140089326
551	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Der f 1 allergen [Dermatophagoides farinae]	156106765
552	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Der f 2 allergen [Dermatophagoides farinae]	156480837
553	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Der f 3 allergen precursor [Dermatophagoides farinae]	163638970
554	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Der f 3 allergen [Dermatophagoides farinae]	218203816
555	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Der f 3 allergen [Dermatophagoides farinae]	218203818

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
556	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Der f 6 allergen [Dermatophagoides farinae]	218203826
557	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Der f 6 allergen [Dermatophagoides farinae]	218203828
558	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Der f 7 allergen [Dermatophagoides farinae]	218203832
559	<i>Dermatophagoides farinae</i>	House dust mite	Unassigned	Der f 2 allergen [Dermatophagoides farinae]	218203834
560	<i>Dermatophagoides microceras</i>	House dust mite	Der m 1	Major mite fecal allergen Der m 1 (Der m I)	127205
561	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 3	Der p 3 allergen	511476
562	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 1	Major mite fecal allergen Der p 1 precursor (Der p I)	730036
563	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 5	Der p V allergen [Dermatophagoides pteronyssinus]	913285
564	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	Glutathione S-transferase (GST class-mu) (Major allergen Der p 8) (P dp 15)	1170095
565	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	Alpha-amylase (Allergen Der p 4) (Der p IV)	1351935
566	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 2	Mite group 2 allergen Der p 2 precursor (Der p II) (DPX)	1352237
567	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 5	Mite allergen Der p 5 (Der P V) (IgE-binding allergen)	1352238
568	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 6	Mite allergen Der p 6 (Der p VI) (DP5)	1352239
569	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	Mite allergen Der p 7 precursor (Der p VII)	1352240
570	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	cysteine protease [Dermatophagoides pteronyssinus]	1460058
571	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 10	tropomyosin [Dermatophagoides pteronyssinus]	2353266
572	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 10	tropomyosin [Dermatophagoides pteronyssinus]	2440053
573	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 4	alpha-amylase [Dermatophagoides pteronyssinus]	5059162

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
574	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 7	unnamed protein product [Dermatophagoides pteronyssinus]	10189811
575	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 14	group 14 allergen protein [Dermatophagoides pteronyssinus]	20385544
576	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 2	Chain A, X-Ray Structure Of Der P 2, The Major House Dust Mite Allergen	21465915
577	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725560
578	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725562
579	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725564
580	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725566
581	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725568
582	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725570
583	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725572
584	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725574
585	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725576
586	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725578
587	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 1	unnamed protein product [Dermatophagoides pteronyssinus]	21725580

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
588	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725582
589	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725584
590	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725586
591	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725588
592	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725590
593	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725592
594	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725594
595	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725596
596	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725600
597	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725602
598	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 2	unnamed protein product [Dermatophagoides pteronyssinus]	21725604
599	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 9	serine protease [Dermatophagoides pteronyssinus]	22595342
600	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 5	unnamed protein product [Dermatophagoides pteronyssinus]	28798085
601	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Der p 11	HDM allergen [Dermatophagoides pteronyssinus]	37778944

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
602	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	glutathione transferase mu class Dp7019C10 [Dermatophagoides pteronyssinus]	60920878
603	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	Der p 1 allergen [Dermatophagoides pteronyssinus]	61608445
604	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	group 18 allergen protein [Dermatophagoides pteronyssinus]	67975085
605	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	Der p 2 allergen precursor [Dermatophagoides pteronyssinus]	76097509
606	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	tropomyosin [Dermatophagoides pteronyssinus]	80553470
607	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	Chain B, Crystal Structure Of Mature And Fully Active Der P 1 Allergen	83754033
608	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	allergen precursor [Dermatophagoides pteronyssinus]	85687540
609	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	Der p 2 allergen precursor [Dermatophagoides pteronyssinus]	99644635
610	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	group 2 allergen Der p 2 [Dermatophagoides pteronyssinus]	110560872
611	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	Der p 1 allergen [Dermatophagoides pteronyssinus]	157696052
612	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	Chain A, Tertiary Structure Of The Major House Dust Mite Allergen Der P 2, Nmr, 10 Structures	157829757
613	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	Der p 2 allergen [Dermatophagoides pteronyssinus]	164415595
614	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	Der p 1 allergen precursor [Dermatophagoides pteronyssinus]	195933901
615	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	tropomyosin [Dermatophagoides pteronyssinus]	208970286
616	<i>Dermatophagoides pteronyssinus</i>	House dust mite	Unassigned	Chain B, C2 Crystal Form Of Mite Allergen Der P 1	223365887
617	<i>Dermatophagoides siboney</i>	House dust mite	Unassigned	Der s 2 a allergen [Dermatophagoides siboney]	86450747

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
618	<i>Dolichovespula arenaria</i>	Yellow jacket	Dol a 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Dol a 5) (Dol a V)	465052
619	<i>Dolichovespula maculata</i>	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
620	<i>Dolichovespula maculata</i>	Whiteface hornet	Dol m 1	Phospholipase A1 1 precursor (Allergen Dol m 1.01) (Dol m I)	548449
621	<i>Dolichovespula maculata</i>	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
622	<i>Dolichovespula maculata</i>	Whiteface hornet	Dol m 2	Hyaluronoglucosaminidase (Hyaluronidase) (Allergen Dol m 2) (Dol m II)	1346322
623	<i>Dolichovespula maculata</i>	Whiteface hornet	Dol m 1	Phospholipase A1 2 (Allergen Dol m 1.02) (Dol m I)	1709542
624	<i>Epicoccum nigrum</i>	Fungus	Unassigned	Major allergen Epi p 1 (Epl n I4625*)	24636820
625	<i>Equus caballus</i>	Horse	Unassigned	Serum albumin precursor (Allergen Equ c 3)	543794
626	<i>Equus caballus</i>	Horse	Equ c 2.0101	Dander allergen Equ c 2.0101	3121755
627	<i>Equus caballus</i>	Horse	Equ c 2.0102	Dander allergen Equ c 2.0102	3121756
628	<i>Equus caballus</i>	Horse	Equ c 1	Major allergen Equ c 1 precursor	3121758
629	<i>Equus caballus</i>	Horse	Unassigned	Latherin precursor (Dander allergen Equ c 4/Equ c 5)	38258932
630	<i>Equus caballus</i>	Horse	Unassigned	Latherin precursor (Dander allergen Equ c 4/Equ c 5)	152031631
631	<i>Erimacrus isenbeckii</i>	Crab	Unassigned	tropomyosin slow-twitch isoform [Erimacrus isenbeckii]	125995169
632	<i>Erimacrus isenbeckii</i>	Crab	Unassigned	tropomyosin slow-tonic isoform [Erimacrus isenbeckii]	125995171
633	<i>Euphausia pacifica</i>	Krill	Unassigned	tropomyosin [Euphausia pacifica]	156712754
634	<i>Euphausia superba</i>	Krill	Unassigned	tropomyosin [Euphausia superba]	156712752
635	<i>Euroglyphus maynei</i>	House dust mite	Eur m 2.0102	group 2 allergen Eur m 2 0102 [Euroglyphus maynei]	3941386
636	<i>Euroglyphus maynei</i>	House dust mite	Eur m 2	Mite group 2 allergen Eur m 2 precursor	14423649

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
637	<i>Fagopyrum esculentum</i>	Buckwheat	Unassigned	BW8KD allergen protein [Fagopyrum esculentum]	17907758
638	<i>Fagopyrum esculentum</i>	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
639	<i>Fagopyrum esculentum</i>	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
640	<i>Fagopyrum esculentum</i>	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
641	<i>Fagopyrum esculentum</i>	Buckwheat	Unassigned	BW 16kDa allergen [Fagopyrum esculentum]	61970231
642	<i>Fagopyrum esculentum</i>	Buckwheat	Unassigned	16 kDa allergen [Fagopyrum esculentum]	83416591
643	<i>Fagopyrum esculentum</i>	Buckwheat	Unassigned	vicilin-like protein [Fagopyrum esculentum]	146217148
644	<i>Fagopyrum gracilipes</i>	Buckwheat	Unassigned	22kDa storage protein [Fagopyrum gracilipes]	6979766
645	<i>Fagopyrum tataricum</i>	Buckwheat	Unassigned	allergenic protein [Fagopyrum tataricum]	113200131
646	<i>Fagopyrum tataricum</i>	Buckwheat	Unassigned	BW10KD allergen protein [Fagopyrum tataricum]	144228127
647	<i>Farfantepenaeus aztecus</i>	Brown shrimp	Pen a 1	Pen a 1 allergen [Farfantepenaeus aztecus]	73532979
648	<i>Felis catus</i>	Cat	Fel d 1	major allergen I	163825

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
649	<i>Felis catus</i>	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
650	<i>Felis catus</i>	Cat	Unassigned	fel d I chain 2 precursor [Felis catus]	395407
651	<i>Felis catus</i>	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
652	<i>Felis catus</i>	Cat	Unassigned	Serum albumin precursor (Allergen Fel d 2)	1351908
653	<i>Felis catus</i>	Cat	Fel d 1	fel d I chain 1 precursor with leader B [Felis catus]	1364212
654	<i>Felis catus</i>	Cat	Fel d 1	fel d I chain 1 precursor with leader A [Felis catus]	1364213
655	<i>Felis catus</i>	Cat	Unassigned	Cystatin-A (Allergen Fel d 3)	47605720
656	<i>Felis catus</i>	Cat	Unassigned	Allergen Fel d 4 precursor	75062228
657	<i>Felis catus</i>	Cat	Unassigned	major allergen I, polypeptide chain 1 [Felis catus]	114326420
658	<i>Forcipomyia taiwana</i>	Midge	Unassigned	serine/threonine protein kinase [Forcipomyia taiwana]	188572341
659	<i>Forcipomyia taiwana</i>	Midge	Unassigned	eukaryotic translation initiation factor [Forcipomyia taiwana]	188572343
660	<i>Fragaria x ananassa</i>	Strawberry	Fra a 1	[Segment 2 of 3] Allergen Fra a 18 kDa	60389904
661	<i>Fragaria x ananassa</i>	Strawberry	Fra a 1	[Segment 3 of 3] Allergen Fra a 18 kDa	60389905
662	<i>Fragaria x ananassa</i>	Strawberry	Fra a 1	Fra a 1-A allergen [Fragaria x ananassa]	88082485
663	<i>Fragaria x ananassa</i>	Strawberry	Fra a 1	Major strawberry allergen Fra a 1-B [Fragaria x ananassa]	90185682
664	<i>Fragaria x ananassa</i>	Strawberry	Fra a 1	Major strawberry allergen Fra a 1-D [Fragaria x ananassa]	90185684
665	<i>Fragaria x ananassa</i>	Strawberry	Fra a 1	Major strawberry allergen Fra a 1-C [Fragaria x ananassa]	90185688
666	<i>Fragaria x ananassa</i>	Strawberry	Fra a 1	Major strawberry allergen Fra a 1-E [Fragaria x ananassa]	90185692
667	<i>Fraxinus excelsior</i>	European ash	Fra e 1	allergen Fra e 1.0101 [Fraxinus excelsior]	33327133

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
668	<i>Fraxinus excelsior</i>	European ash	Fra e 1	allergen Fra e 1 [Fraxinus excelsior]	34978692
669	<i>Fraxinus excelsior</i>	European ash	Fra e 1	Fra e 1.0102 major allergen [Fraxinus excelsior]	56122438
670	<i>Fulvia mutica</i>	Clam	Unassigned	tropomyosin [Fulvia mutica]	219806596
671	<i>Fusarium culmorum</i>	Fungus	Unassigned	helix-loop-helix protein [Fusarium culmorum]	25361513
672	<i>Fusarium culmorum</i>	Fungus	Unassigned	RecName: Full=60S acidic ribosomal protein P2; AltName: Allergen=Fus c 1	41688715
673	<i>Fusarium culmorum</i>	Fungus	Unassigned	Thioredoxin-like protein (Allergen Fus c 2)	52783462
674	<i>Gadus callarias</i>	Baltic cod	Gad c 1	Parvalbumin beta (Allergen Gad c 1) (Gad c I) (Allergen M)	131112
675	<i>Gadus morhua</i>	Atlantic cod	Unassigned	parvalbumin beta [Gadus morhua]	14531014
676	<i>Gadus morhua</i>	Atlantic cod	Unassigned	parvalbumin beta [Gadus morhua]	14531016
677	<i>Gadus morhua</i>	Atlantic cod	Unassigned	parvalbumin beta [Gadus morhua]	148356691
678	<i>Gadus morhua</i>	Atlantic cod	Unassigned	parvalbumin beta [Gadus morhua]	148356693
679	<i>Gallus gallus</i>	Chicken	Gal d 2	unnamed protein product [Gallus gallus]	63052
680	<i>Gallus gallus</i>	Chicken	Unassigned	Serum albumin precursor (Alpha-livetin) (Allergen Gal d 5)	113575
681	<i>Gallus gallus</i>	Chicken	Gal d 1	Ovomucoid precursor (Allergen Gal d 1) (Gal d I)	124757
682	<i>Gallus gallus</i>	Chicken	Gal d 4	Lysozyme C precursor (1,4-beta-N-acetylmuramidase C) (Allergen Gal d 4) (Gal d IV)	126608
683	<i>Gallus gallus</i>	Chicken	Gal d 2	Ovalbumin (Plakalbumin) (Allergen Gal d 2) (Gal d II)	129293
684	<i>Gallus gallus</i>	Chicken	Gal d 4	lysozyme protein	212279
685	<i>Gallus gallus</i>	Chicken	Gal d 3	ovotransferrin [Gallus gallus]	757851
686	<i>Gallus gallus</i>	Chicken	Gal d 2	unnamed protein product [Gallus gallus]	808969
687	<i>Gallus gallus</i>	Chicken	Gal d 3	Ovotransferrin precursor (Conalbumin) (Allergen Gal d 3) (Gal d III) (Serum transferrin)	1351295

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
688	<i>Gallus gallus</i>	Chicken	Gal d 2	Chain A, Loop-Inserted Structure Of P1-P1' Cleaved Ovalbumin Mutant R339t	15826578
689	<i>Gallus gallus</i>	Chicken	Unassigned	Chain D, Crystal Structure Of S-Ovalbumin At 1.9 Angstrom Resolution	34811333
690	<i>Gallus gallus</i>	Chicken	Unassigned	ovomucoid [Gallus gallus]	162952006
691	<i>Gallus gallus</i>	Chicken	Unassigned	ovomucoid [Gallus gallus]	209979542
692	<i>Gallus gallus</i>	Chicken	Unassigned	parvalbumin [Gallus gallus]	225877920
693	<i>Gibberella zeae PH-1</i>	Fungus	Unassigned	RLA2_ALTAL 60S acidic ribosomal protein P2 (Minor allergen Alt a 6) (Alt a VI) [Gibberella zeae PH-1]	46122455
694	<i>Glycine max</i>	Soybean	Unassigned	unnamed protein product [Glycine max]	18536
695	<i>Glycine max</i>	Soybean	Unassigned	unnamed protein product [Glycine max]	18609
696	<i>Glycine max</i>	Soybean	Unassigned	unnamed protein product [Glycine max]	18615
697	<i>Glycine max</i>	Soybean	Unassigned	glycinin subunit G1 [Glycine max]	18635
698	<i>Glycine max</i>	Soybean	Unassigned	glycinin subunit G2 [Glycine max]	18637
699	<i>Glycine max</i>	Soybean	Unassigned	glycinin subunit G3 [Glycine max]	18639
700	<i>Glycine max</i>	Soybean	Unassigned	glycinin [Glycine max]	18641
701	<i>Glycine max</i>	Soybean	Unassigned	trypsin inhibitor subtype A [Glycine max]	18770
702	<i>Glycine max</i>	Soybean	Unassigned	trypsin inhibitor subtype B [Glycine max]	18772
703	<i>Glycine max</i>	Soybean	Unassigned	P34 probable thiol protease precursor	129353
704	<i>Glycine max</i>	Soybean	Unassigned	Stress-induced protein SAM22 (Starvation-associated message 22) (Allergen Gly m 4)	134194
705	<i>Glycine max</i>	Soybean	Unassigned	beta-conglycinin-alpha subunit	169927
706	<i>Glycine max</i>	Soybean	Unassigned	beta-conglycinin storage protein [Glycine max]	169929
707	<i>Glycine max</i>	Soybean	Unassigned	glycinin	169969
708	<i>Glycine max</i>	Soybean	Unassigned	glycinin precursor	169971
709	<i>Glycine max</i>	Soybean	Unassigned	CG4 beta-conglycinin [Glycine max]	256427

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
710	<i>Glycine max</i>	Soybean	Unassigned	Kunitz trypsin inhibitor; KTi [Glycine max]	256429
711	<i>Glycine max</i>	Soybean	Unassigned	Kunitz trypsin inhibitor KTi1 [Glycine max]	256635
712	<i>Glycine max</i>	Soybean	Unassigned	Kunitz trypsin inhibitor KTi2 [Glycine max]	256636
713	<i>Glycine max</i>	Soybean	Unassigned	Kunitz trypsin inhibitor [Glycine max]	510515
714	<i>Glycine max</i>	Soybean	Unassigned	unnamed protein product [Glycine max]	732706
715	<i>Glycine max</i>	Soybean	Gly m 1.0101	Gly m IA allergen, HPS=hydrophobic seed protein {N-terminal} [Glycine max=soybeans, hulls, Peptide Partial, 42 aa]	999355
716	<i>Glycine max</i>	Soybean	Unassigned	34 kDa maturing seed vacuolar thiol protease precursor [Glycine max]	1199563
717	<i>Glycine max</i>	Soybean	Gly m 2	hull allergen Gly m 2 - soybean (fragment)	1362049
718	<i>Glycine max</i>	Soybean	Gly m 3	profilin [Glycine max]	3021373
719	<i>Glycine max</i>	Soybean	Unassigned	Bd 30K [Glycine max]	3097321
720	<i>Glycine max</i>	Soybean	Gly m 3	Profilin-1 (GmPRO1) (Allergen Gly m 3)	3914435
721	<i>Glycine max</i>	Soybean	Unassigned	allergen Gly m Bd 28K [Glycine max]	12697782
722	<i>Glycine max</i>	Soybean	Unassigned	hydrophobic seed protein precursor-like [Glycine max]	76782247
723	<i>Glycine max</i>	Soybean	Unassigned	hydrophobic seed protein precursor [Glycine max]	76782249
724	<i>Glycine max</i>	Soybean	Unassigned	Major Gly 50 kDa allergen	85681057
725	<i>Glycine max</i>	Soybean	Unassigned	profilin [Glycine max]	156938901
726	<i>Glycine max</i>	Soybean	Unassigned	Gly m Bd 28K allergen [Glycine max]	187766747
727	<i>Glycine max</i>	Soybean	Unassigned	Gly m Bd 28K allergen [Glycine max]	187766749
728	<i>Glycine max</i>	Soybean	Unassigned	Gly m Bd 28K allergen [Glycine max]	187766751
729	<i>Glycine max</i>	Soybean	Unassigned	Gly m Bd 28K allergen [Glycine max]	187766755
730	<i>Glycine soja</i>	Soybean	Unassigned	Gy5 [Glycine soja]	736002
731	<i>Glycine soja</i>	Soybean	Unassigned	A5A4B3 subunit [Glycine soja]	806556
732	<i>Glycyphagus domesticus</i>	Storage mite	Unassigned	Gly d 2.03 [Glycyphagus domesticus]	33772588
733	<i>Glycyphagus domesticus</i>	Storage mite	Unassigned	Mite group 2 allergen Gly d 2.02	48428170
734	<i>Glycyphagus domesticus</i>	Storage mite	Unassigned	Mite group 2 allergen Gly d 2.01	48428178

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
735	<i>Haliotis discus discus</i>	Mollusk	Unassigned	tropomyosin [ <i>Haliotis discus discus</i> ]	219806586
736	<i>Haliotis diversicolor</i>	Mollusk	Unassigned	tropomyosin [ <i>Haliotis diversicolor</i> ]	9954249
737	<i>Helianthus annuus</i>	Sunflower	Unassigned	Albumin-8 precursor (Methionine-rich 2S protein) (SFA8)	112745
738	<i>Helianthus annuus</i>	Sunflower	Hel a 2	profilin [ <i>Helianthus annuus</i> ]	3581965
739	<i>Helix aspersa</i>	Brown garden snail	Unassigned	Tropomyosin (Allergen Hel as 1)	42559558
740	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 6	Pro-hevein precursor (Major hevein) [Contains: Hevein (Allergen Hev b 6); Win-like protein]	123062
741	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 1	Rubber elongation factor protein (REF) (Allergen Hev b 1)	132270
742	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 10.0101	superoxide dismutase (manganese)	348137
743	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 2	beta-1,3-glucanase	1184668
744	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 7.01	latex patatin homolog [ <i>Hevea brasiliensis</i> ]	1916805
745	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 6	prohevein [ <i>Hevea brasiliensis</i> ]	2832430
746	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 7.02	latex allergen [ <i>Hevea brasiliensis</i> ]	3087805
747	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 8	profilin [ <i>Hevea brasiliensis</i> ]	3183706
748	<i>Hevea brasiliensis</i>	Para rubber tree	Unassigned	latex allergen [ <i>Hevea brasiliensis</i> ]	3288200
749	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 10.0102	MnSOD [ <i>Hevea brasiliensis</i> ]	5777414
750	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 7	latex protein allergen Hev b 7 [ <i>Hevea brasiliensis</i> ]	6707018
751	<i>Hevea brasiliensis</i>	Para rubber tree	Unassigned	Major latex allergen Hev b 5	7387766
752	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 10.0103	IgE-binding protein MnSOD [ <i>Hevea brasiliensis</i> ]	10862818
753	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 8	Chain A, Latex Profilin Hevb8	11513601
754	<i>Hevea brasiliensis</i>	Para rubber tree	Unassigned	Enolase 2 (2-phosphoglycerate dehydratase 2) (2-phospho-D-glycerate hydro-lyase 2) (Allergen Hev b 9)	14423687

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
755	<i>Hevea brasiliensis</i>	Para rubber tree	Unassigned	Enolase 1 (2-phosphoglycerate dehydratase 1) (2-phospho-D-glycerate hydro-lyase 1) (Allergen Hev b 9)	14423688
756	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 8.0204	Profilin-6 (Pollen allergen Hev b 8.0204)	14423856
757	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 8.0203	Profilin-5 (Pollen allergen Hev b 8.0203)	14423858
758	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 8.0202	Profilin-4 (Pollen allergen Hev b 8.0202)	14423859
759	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 8.0201	Profilin-3 (Pollen allergen Hev b 8.0201)	14423860
760	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 8.0102	Profilin-2 (Pollen allergen Hev b 8.0102)	14423868
761	<i>Hevea brasiliensis</i>	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
762	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 11	putative class I chitinase [Hevea brasiliensis]	14575525
763	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 12	lipid transfer precursor protein [Hevea brasiliensis]	20135538
764	<i>Hevea brasiliensis</i>	Para rubber tree	Hev b 2	beta-1,3-glucanase [Hevea brasiliensis]	32765543
765	<i>Hevea brasiliensis</i>	Para rubber tree	Unassigned	putative latex allergen hev b 7.02 [Hevea brasiliensis]	41581137
766	<i>Hevea brasiliensis</i>	Para rubber tree	Unassigned	major latex allergen Hev b 4 [Hevea brasiliensis]	46410859
767	<i>Hevea brasiliensis</i>	Para rubber tree	Unassigned	Esterase precursor (Early nodule-specific protein homolog) (Latex allergen Hev b 13)	51315784
768	<i>Hevea brasiliensis</i>	Para rubber tree	Unassigned	Chain A, Crystal Structure Of A Hev B 6.02 Isoallergen	73535415
769	<i>Hevea brasiliensis</i>	Para rubber tree	Unassigned	beta-1,3-glucanase [Hevea brasiliensis]	124294783
770	<i>Hevea brasiliensis</i>	Para rubber tree	Unassigned	beta-1,3-glucanase [Hevea brasiliensis]	124294785
771	<i>Hevea brasiliensis</i>	Para rubber tree	Unassigned	beta-1,3-glucanase [Hevea brasiliensis]	124365249
772	<i>Hevea brasiliensis</i>	Para rubber tree	Unassigned	beta-1,3-glucanase [Hevea brasiliensis]	124365251
773	<i>Hevea brasiliensis</i>	Para rubber tree	Unassigned	beta-1,3-glucanase [Hevea brasiliensis]	124365253

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
774	<i>Hevea brasiliensis</i>	Para rubber tree	Unassigned	hevein [ <i>Hevea brasiliensis</i> ]	158342650
775	<i>Hevea brasiliensis</i> subsp. <i>brasiliensis</i>	Para rubber tree	Hev b 11	class I chitinase [ <i>Hevea brasiliensis</i> subsp. <i>brasiliensis</i> ]	27526732
776	<i>Holcus lanatus</i>	Velvet grass	Hol I 1.0102	protein with incomplete signal sequence [ <i>Holcus lanatus</i> ]	1167836
777	<i>Holcus lanatus</i>	Velvet grass	Unassigned	Major pollen allergen Hol I 1 precursor (Hol I I) (Hol I 1.0101 and 1.0102)	1171005
778	<i>Holcus lanatus</i>	Velvet grass	Unassigned	group V grass pollen allergen [ <i>Holcus lanatus</i> ]	2266623
779	<i>Holcus lanatus</i>	Velvet grass	Unassigned	group V allergen [ <i>Holcus lanatus</i> ]	2266625
780	<i>Holcus lanatus</i>	Velvet grass	Unassigned	major group I allergen Hol I 1 [ <i>Holcus lanatus</i> ]	3860384
781	<i>Holcus lanatus</i>	Velvet grass	Unassigned	pollen allergen Hol I 5b [ <i>Holcus lanatus</i> ]	11991229
782	<i>Homarus americanus</i>	American lobster	Unassigned	fast tropomyosin isoform [ <i>Homarus americanus</i> ]	2660868
783	<i>Homarus americanus</i>	American lobster	Unassigned	Tropomyosin (Allergen Hom a 1)	14285796
784	<i>Hordeum vulgare</i>	Barley	Unassigned	LTP 1 [ <i>Hordeum vulgare</i> ]	19039
785	<i>Hordeum vulgare</i>	Barley	Unassigned	amylase/protease inhibitor	167077
786	<i>Hordeum vulgare</i>	Barley	Unassigned	Alpha-amylase/trypsin inhibitor CMb precursor (Chloroform/methanol-soluble protein CMb)	585290
787	<i>Hordeum vulgare</i>	Barley	Unassigned	trypsin inhibitor cme precursor [ <i>Hordeum vulgare</i> ]	1405736
788	<i>Hordeum vulgare</i>	Barley	Hor v 15	Alpha-amylase inhibitor BMAI-1 precursor (Allergen Hor v 1) (Alpha-amylase flour inhibitor)	2506771
789	<i>Hordeum vulgare</i> subsp. <i>vulgare</i>	Barley	Unassigned	alpha-amylase inhibitor [ <i>Hordeum vulgare</i> subsp. <i>vulgare</i> ]	18955
790	<i>Hordeum vulgare</i> subsp. <i>vulgare</i>	Barley	Unassigned	CMe [ <i>Hordeum vulgare</i> subsp. <i>vulgare</i> ]	19009
791	<i>Hordeum vulgare</i> subsp. <i>vulgare</i>	Barley	Unassigned	CMa, component of tetrameric alpha-amylase inhibitor [ <i>Hordeum vulgare</i> subsp. <i>vulgare</i> ]	439275

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
792	<i>Hordeum vulgare subsp. vulgare</i>	Barley	Unassigned	BDAI-1; Barley dimeric alpha-amylase inhibitor [Hordeum vulgare subsp. vulgare]	3367714
793	<i>Humulus japonicus</i>	Japanese hop	Hum j 1	Humj1 [Humulus japonicus]	33113263
794	<i>Humulus scandens</i>	Japanese hop	Unassigned	profilin-like protein [Humulus scandens]	34851174
795	<i>Humulus scandens</i>	Japanese hop	Unassigned	profilin-like protein [Humulus scandens]	34851176
796	<i>Juglans nigra</i>	Black walnut	Jug n 1	2S albumin seed storage protein [Juglans nigra]	31321942
797	<i>Juglans nigra</i>	Black walnut	Jug n 2	vicilin seed storage protein [Juglans nigra]	31321944
798	<i>Juglans regia</i>	English walnut	Jug r 1	albumin seed storage protein precursor [Juglans regia]	1794252
799	<i>Juglans regia</i>	English walnut	Jug r 2	vicilin-like protein precursor [Juglans regia]	6580762
800	<i>Juglans regia</i>	English walnut	Unassigned	seed storage protein [Juglans regia]	56788031
801	<i>Juniperus ashei</i>	Mountain cedar	Unassigned	Major pollen allergen Jun a 1 precursor	9087152
802	<i>Juniperus ashei</i>	Mountain cedar	Unassigned	Pathogenesis-related protein precursor (Pollen allergen Jun a 3)	9087177
803	<i>Juniperus ashei</i>	Mountain cedar	Unassigned	Polygalacturonase precursor (PG) (Pectinase) (Major pollen allergen Jun a 2)	47606048
804	<i>Juniperus oxycedrus</i>	Juniper	Unassigned	Polcalcin Jun o 2 (Calcium-binding pollen allergen Jun o 2)	14423843
805	<i>Juniperus oxycedrus</i>	Juniper	Unassigned	putative allergen jun o 1 [Juniperus oxycedrus]	15139849
806	<i>Juniperus rigida</i>	Cedar	Unassigned	PR5 allergen Jun r 3.1 precursor [Juniperus rigida]	38456222
807	<i>Juniperus rigida</i>	Cedar	Unassigned	PR5 allergen Jun r 3.2 precursor [Juniperus rigida]	38456224
808	<i>Juniperus virginiana</i>	Red cedar	Jun v 1	pollen major allergen 1-2 [Juniperus virginiana]	8843917
809	<i>Juniperus virginiana</i>	Red cedar	Jun v 1	pollen major allergen 1-1 [Juniperus virginiana]	8843921

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
810	<i>Juniperus virginiana</i>	Red cedar	Unassigned	Pathogenesis-related protein precursor (Potential major pollen allergen Jun v 3)	51316532
811	<i>Lens culinaris</i>	Lentil	Len c 1.0101	allergen Len c 1.0101 [Lens culinaris]	29539109
812	<i>Lens culinaris</i>	Lentil	Len c 1.0102	allergen Len c 1.0102 [Lens culinaris]	29539111
813	<i>Lepidoglyphus destructor</i>	Storage mite	Lep d 2	allergen Lep d 1.01	1582222
814	<i>Lepidoglyphus destructor</i>	Storage mite	Lep d 2	allergen Lep d 1.02	1582223
815	<i>Lepidoglyphus destructor</i>	Storage mite	Unassigned	Mite group 2 allergen Lep d 2 precursor (Lep d 1) (Lep d I)	1708793
816	<i>Lepidoglyphus destructor</i>	Storage mite	Lep d 2	allergen Lep d 1.02 precursor - Lepidoglyphus destructor	2147108
817	<i>Lepidoglyphus destructor</i>	Storage mite	Lep d 7	Mite allergen Lep d 7 precursor	14423650
818	<i>Lepidoglyphus destructor</i>	Storage mite	Lep d 5	Mite allergen Lep d 5	14423651
819	<i>Lepidoglyphus destructor</i>	Storage mite	Lep d 13	Fatty acid-binding protein (Allergen Lep d 13)	14423714
820	<i>Lepidoglyphus destructor</i>	Storage mite	Lep d 10	Tropomyosin (Allergen Lep d 10)	14423956
821	<i>Lepidoglyphus destructor</i>	Storage mite	Lep d 2	Lep D 2 precursor [Lepidoglyphus destructor]	21213898
822	<i>Lepidoglyphus destructor</i>	Storage mite	Lep d 2	Lep D 2 precursor [Lepidoglyphus destructor]	21213900
823	<i>Lepidoglyphus destructor</i>	Storage mite	Unassigned	type 2 allergen Lep d 2.013 [Lepidoglyphus destructor]	34495274
824	<i>Lepidoglyphus destructor</i>	Storage mite	Unassigned	type 2 allergen Lep d 2.023 [Lepidoglyphus destructor]	34495278
825	<i>Lepidoglyphus destructor</i>	Storage mite	Unassigned	type 2 allergen Lep d 2.024 [Lepidoglyphus destructor]	34495280
826	<i>Lepidoglyphus destructor</i>	Storage mite	Unassigned	type 2 allergen Lep d 2.025 [Lepidoglyphus destructor]	34495282
827	<i>Lepidoglyphus destructor</i>	Storage mite	Unassigned	type 2 allergen Lep d 2.031 [Lepidoglyphus destructor]	34495284
828	<i>Lepidoglyphus destructor</i>	Storage mite	Unassigned	type 2 allergen Lep d 2.035 [Lepidoglyphus destructor]	34495286
829	<i>Lepidoglyphus destructor</i>	Storage mite	Unassigned	type 2 allergen Lep d 2.039 [Lepidoglyphus destructor]	34495288

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
830	<i>Lepidoglyphus destructor</i>	Storage mite	Unassigned	type 2 allergen Lep d 2.042 [Lepidoglyphus destructor]	34495290
831	<i>Lepidoglyphus destructor</i>	Storage mite	Unassigned	type 2 allergen Lep d 5.02 [Lepidoglyphus destructor]	34495292
832	<i>Lepidoglyphus destructor</i>	Storage mite	Unassigned	type 2 allergen Lep d 5.04 [Lepidoglyphus destructor]	34495294
833	<i>Lepidorhombus whiffiagonis</i>	Mite	Unassigned	parvalbumin [Lepidorhombus whiffiagonis]	208608078
834	<i>Lepisma saccharina</i>	Silverfish	Lep s 1	tropomyosin [Lepisma saccharina]	20387027
835	<i>Lepisma saccharina</i>	Silverfish	Unassigned	tropomyosin [Lepisma saccharina]	20387029
836	<i>Ligustrum vulgare</i>	Privet	Lig v 1.0102	major allergen [Ligustrum vulgare]	3256212
837	<i>Ligustrum vulgare</i>	Privet	Unassigned	Major pollen allergen Lig v 1	14423737
838	<i>Lilium longiflorum</i>	Trumpet lily	Unassigned	polygalacturonase [Lilium longiflorum]	73913442
839	<i>Litchi chinensis</i>	Lychee nut	Lit c 1	profilin [Litchi chinensis]	15809696
840	<i>Litchi chinensis</i>	Lychee nut	Unassigned	profilin [Litchi chinensis]	83317152
841	<i>Litopenaeus vannamei</i>	Pacific white shrimp	Unassigned	arginine kinase [Litopenaeus vannamei]	115492980
842	<i>Litopenaeus vannamei</i>	Pacific white shrimp	Unassigned	Lit v 3 allergen myosin light chain [Litopenaeus vannamei]	184198734
843	<i>Lolium italicum</i>	Italian rye grass	Unassigned	pollen allergen (group II) [Lolium italicum]	4007636
844	<i>Lolium perenne</i>	Perennial ryegrass	Lol p 1	Pollen allergen Lol p 1 precursor (Lol p I) (Allergen R7)	126385
845	<i>Lolium perenne</i>	Perennial ryegrass	Lol p 2	Pollen allergen Lol p 2-A (Lol p II-A)	126386
846	<i>Lolium perenne</i>	Perennial ryegrass	Lol p 3	Pollen allergen Lol p 3 (Lol p III)	126387
847	<i>Lolium perenne</i>	Perennial ryegrass	Lol p 1	pollen allergen	168314
848	<i>Lolium perenne</i>	Perennial ryegrass	Unassigned	pollen allergen	168316
849	<i>Lolium perenne</i>	Perennial ryegrass	Lol p 2	allergen Lol p II [Lolium perenne]	939932
850	<i>Lolium perenne</i>	Perennial ryegrass	Lol p 5	Major pollen allergen Lol p 5a precursor (Lol p Va) (Lol p Ib)	2498581
851	<i>Lolium perenne</i>	Perennial ryegrass	Lol p 5	Major pollen allergen Lol p 5b precursor (Lol p Vb)	2498582

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
852	<i>Lolium perenne</i>	Perennial ryegrass	Lol p 5	pollen allergen Lol p VA precursor; major allergen [ <i>Lolium perenne</i> ]	4416516
853	<i>Lolium perenne</i>	Perennial ryegrass	Lol p 5	pollen allergen [ <i>Lolium perenne</i> ]	6634467
854	<i>Lolium perenne</i>	Perennial ryegrass	Lol p 11	Major pollen allergen Lol p 11 (Lol p XI)	47605808
855	<i>Lolium perenne</i>	Perennial ryegrass	Unassigned	pollen allergen Lol p 4 [ <i>Lolium perenne</i> ]	55859464
856	<i>Lolium perenne</i>	Perennial ryegrass	Lol p 1	Pollen allergen	75274600
857	<i>Lupinus angustifolius</i>	Blue lupine	Unassigned	conglutin beta [ <i>Lupinus angustifolius</i> ]	149208401
858	<i>Lupinus angustifolius</i>	Blue lupine	Unassigned	conglutin beta [ <i>Lupinus angustifolius</i> ]	149208403
859	<i>Lupinus angustifolius</i>	Blue lupine	Unassigned	conglutin beta [ <i>Lupinus angustifolius</i> ]	169950562
860	<i>Lycopersicon esculentum</i>	Tomato	Lyc e 1	profilin [ <i>Lycopersicon esculentum</i> ]	16555787
861	<i>Lycopersicon esculentum</i>	Tomato	Lyc e 1	profilin [ <i>Lycopersicon esculentum</i> ]	17224229
862	<i>Lycopersicon esculentum</i>	Tomato	Lyc e 2.0101	minor allergen beta-fructofuranosidase precursor [ <i>Lycopersicon esculentum</i> ]	18542113
863	<i>Lycopersicon esculentum</i>	Tomato	Lyc e 2.0102	minor allergen beta-fructofuranosidase precursor [ <i>Lycopersicon esculentum</i> ]	18542115
864	<i>Lycopersicon esculentum</i>	Tomato	Unassigned	non-specific lipid transfer protein [ <i>Lycopersicon esculentum</i> ]	71360928
865	<i>Lycopersicon esculentum</i>	Tomato	Unassigned	non-specific lipid transfer protein [ <i>Lycopersicon esculentum</i> ]	71360930
866	<i>Malassezia furfur</i>	Yeast	Unassigned	Putative peroxiredoxin (Thioredoxin reductase) (Allergen Mal f 2) (MF1)	3914386
867	<i>Malassezia furfur</i>	Yeast	Unassigned	Putative peroxiredoxin (Thioredoxin reductase) (Allergen Mal f 3) (MF2)	3914387
868	<i>Malassezia furfur</i>	Yeast	Mala f 4	major allergenic protein Mal f4 [ <i>Malassezia furfur</i> ]	4587985
869	<i>Malassezia furfur</i>	Yeast	Unassigned	Major allergen Mal f 1 precursor (Pit o 1)	13959403
870	<i>Malassezia sympodialis</i>	Yeast	Mala s 5	allergen [ <i>Malassezia sympodialis</i> ]	4138171

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
871	<i>Malassezia sympodialis</i>	Yeast	Mala s 7	allergen [Malassezia sympodialis]	4138175
872	<i>Malassezia sympodialis</i>	Yeast	Mala s 8	allergen [Malassezia sympodialis]	7271239
873	<i>Malassezia sympodialis</i>	Yeast	Mala s 9	allergen [Malassezia sympodialis]	19069920
874	<i>Malassezia sympodialis</i>	Yeast	Mala s 11	manganese superoxide dismutase [Malassezia sympodialis]	28569698
875	<i>Malassezia sympodialis</i>	Yeast	Unassigned	mala s 12 allergen precursor [Malassezia sympodialis]	78038796
876	<i>Malassezia sympodialis</i>	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
877	<i>Malassezia sympodialis</i>	Yeast	Unassigned	Chain A, The 1.5 A Crystal Structure Of The Malassezia Sympodialis Mala S 6 Allergen, A Member Of The Cyclophilin Pan-Allergen Family	157881468
878	<i>Malus x domestica</i>	Apple	Unassigned	major allergen {N-terminal} [apples, Golden Delicious, Peptide Partial, 37 aa]	1174276
879	<i>Malus x domestica</i>	Apple	Mal d 1	major allergen Mal d 1 [Malus x domestica]	1313966
880	<i>Malus x domestica</i>	Apple	Mal d 1	major allergen Mal d 1 [Malus x domestica]	1313968
881	<i>Malus x domestica</i>	Apple	Mal d 1	major allergen Mal d1 [Malus x domestica]	1313970
882	<i>Malus x domestica</i>	Apple	Mal d 1	major allergen Mal d1 [Malus x domestica]	1313972
883	<i>Malus x domestica</i>	Apple	Mal d 1	Major allergen Mal d 1 (Mal d I)	1346478
884	<i>Malus x domestica</i>	Apple	Unassigned	18 kda major allergen/Bet v 1 homolog {N-terminal} [Malus domestica=apple trees, Golden Delicious, fruit, Peptide Partial, 25 aa]	1478292

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
885	<i>Malus x domestica</i>	Apple	Unassigned	31 kda major allergen/disease resistance protein homolog {N-terminal} [Malus domestica=apple trees, Golden Delicious, fruit, Peptide Partial, 26 aa]	1478293
886	<i>Malus x domestica</i>	Apple	Mal d 1	major allergen Mal d 1 [Malus x domestica]	2443824
887	<i>Malus x domestica</i>	Apple	Mal d 1	major allergen mal d 1 [Malus x domestica]	4590364
888	<i>Malus x domestica</i>	Apple	Mal d 1	major allergen mal d 1 [Malus x domestica]	4590366
889	<i>Malus x domestica</i>	Apple	Mal d 1	major allergen mal d 1 [Malus x domestica]	4590368
890	<i>Malus x domestica</i>	Apple	Mal d 1	major allergen mal d 1 [Malus x domestica]	4590376
891	<i>Malus x domestica</i>	Apple	Mal d 1	major allergen mal d 1 [Malus x domestica]	4590380
892	<i>Malus x domestica</i>	Apple	Mal d 1	major allergen mal d 1 [Malus x domestica]	4590382
893	<i>Malus x domestica</i>	Apple	Mal d 1	major allergen mal d 1 [Malus x domestica]	4590388
894	<i>Malus x domestica</i>	Apple	Unassigned	Non-specific lipid-transfer protein precursor (LTP) (Allergen Mal d 3)	14423814
895	<i>Malus x domestica</i>	Apple	Mal d 4	Profilin-1 (GD4-1) (Pollen allergen Mal d 4)	14423873
896	<i>Malus x domestica</i>	Apple	Mal d 4	Profilin-2 (GD4-2) (Pollen allergen Mal d 4)	14423874
897	<i>Malus x domestica</i>	Apple	Mal d 4	Profilin-3 (GD4-5) (Pollen allergen Mal d 4)	14423875
898	<i>Malus x domestica</i>	Apple	Mal d 1	ypr10 [Malus x domestica]	16555783
899	<i>Malus x domestica</i>	Apple	Mal d 1	major allergen d 1 [Malus x domestica]	21685277
900	<i>Malus x domestica</i>	Apple	Mal d 1	major allergen Mal d 1 [Malus x domestica]	27922941
901	<i>Malus x domestica</i>	Apple	Mal d 4	profilin [Malus x domestica]	28881453
902	<i>Malus x domestica</i>	Apple	Mal d 4	profilin [Malus x domestica]	28881455
903	<i>Malus x domestica</i>	Apple	Mal d 4	profilin [Malus x domestica]	28881457
904	<i>Malus x domestica</i>	Apple	Unassigned	Thaumatococcus-like protein 1a precursor (Allergen Mal d 2) (Mdtl1) (Pathogenesis-related protein 5a) (PR-5a)	30316292

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
905	<i>Malus x domestica</i>	Apple	Unassigned	allergen Mal d 3 [Malus x domestica]	38492338
906	<i>Malus x domestica</i>	Apple	Unassigned	lipid transfer protein precursor [Malus x domestica]	50659859
907	<i>Malus x domestica</i>	Apple	Unassigned	lipid transfer protein precursor [Malus x domestica]	50659879
908	<i>Malus x domestica</i>	Apple	Unassigned	lipid transfer protein precursor [Malus x domestica]	50659885
909	<i>Malus x domestica</i>	Apple	Unassigned	lipid transfer protein precursor [Malus x domestica]	50659889
910	<i>Malus x domestica</i>	Apple	Unassigned	lipid transfer protein precursor [Malus x domestica]	50659891
911	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.02 [Malus x domestica]	60280797
912	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.04 [Malus x domestica]	60280803
913	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.0501 [Malus x domestica]	60280807
914	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.0502 [Malus x domestica]	60280809
915	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.06A02 [Malus x domestica]	60280811
916	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.06A01 [Malus x domestica]	60280815
917	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.06B [Malus x domestica]	60280817
918	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.06B [Malus x domestica]	60280819
919	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.06B [Malus x domestica]	60280821
920	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.06C [Malus x domestica]	60280823
921	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.06C [Malus x domestica]	60280825
922	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.06C [Malus x domestica]	60280827
923	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.07 [Malus x domestica]	60280829

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
924	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.07 [Malus x domestica]	60280831
925	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.08 [Malus x domestica]	60280837
926	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.09 [Malus x domestica]	60280839
927	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.03A [Malus x domestica]	60280841
928	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.03B [Malus x domestica]	60280843
929	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.03C [Malus x domestica]	60280847
930	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.03D [Malus x domestica]	60280849
931	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.03D [Malus x domestica]	60280851
932	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.03E [Malus x domestica]	60280853
933	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.03E [Malus x domestica]	60280855
934	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.03F [Malus x domestica]	60280859
935	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.03F [Malus x domestica]	60280861
936	<i>Malus x domestica</i>	Apple	Unassigned	major allergen Mal d 1.03G [Malus x domestica]	60280863
937	<i>Malus x domestica</i>	Apple	Unassigned	thaumatin-like protein precursor [Malus x domestica]	60418842
938	<i>Malus x domestica</i>	Apple	Unassigned	thaumatin-like protein precursor [Malus x domestica]	60418848
939	<i>Malus x domestica</i>	Apple	Unassigned	profilin 1 [Malus x domestica]	60418854
940	<i>Malus x domestica</i>	Apple	Unassigned	profilin 1 [Malus x domestica]	60418858
941	<i>Malus x domestica</i>	Apple	Unassigned	profilin 2 [Malus x domestica]	60418862
942	<i>Malus x domestica</i>	Apple	Unassigned	profilin 2 [Malus x domestica]	60418866
943	<i>Malus x domestica</i>	Apple	Unassigned	Mal d 1.0105 [Malus x domestica]	60460572

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
944	<i>Malus x domestica</i>	Apple	Unassigned	PR-10 protein [Malus x domestica]	164510818
945	<i>Malus x domestica</i>	Apple	Unassigned	PR-10 protein [Malus x domestica]	164510820
946	<i>Malus x domestica</i>	Apple	Unassigned	PR-10 protein [Malus x domestica]	164510824
947	<i>Malus x domestica</i>	Apple	Unassigned	PR-10 protein [Malus x domestica]	164510828
948	<i>Malus x domestica</i>	Apple	Unassigned	PR-10 protein [Malus x domestica]	164510834
949	<i>Malus x domestica</i>	Apple	Unassigned	PR-10 protein [Malus x domestica]	164510838
950	<i>Malus x domestica</i>	Apple	Unassigned	PR-10 protein [Malus x domestica]	164510840
951	<i>Malus x domestica</i>	Apple	Unassigned	profilin [Malus x domestica]	164510842
952	<i>Malus x domestica</i>	Apple	Unassigned	profilin [Malus x domestica]	164510858
953	<i>Malus x domestica</i>	Apple	Unassigned	profilin [Malus x domestica]	164510860
954	<i>Malus x domestica</i>	Apple	Unassigned	thaumatin-like protein [Malus x domestica]	218059715
955	<i>Malus x domestica</i>	Apple	Unassigned	thaumatin-like protein [Malus x domestica]	218059718
956	<i>Malus x domestica</i>	Apple	Unassigned	lipid transfer protein [Malus x domestica]	218059726
957	<i>Malus x domestica</i>	Apple	Unassigned	profilin [Malus x domestica]	218059728
958	<i>Malus x domestica</i>	Apple	Unassigned	profilin [Malus x domestica]	218059730
959	<i>Malus x domestica</i>	Apple	Unassigned	profilin [Malus x domestica]	218059733
960	<i>Marsupenaeus japonicus</i>	Prawn	Unassigned	tropomyosin fast isoform [Marsupenaeus japonicus]	125995159
961	<i>Mercurialis annua</i>	Annual mercury grass	Mer a 1	Profilin [Mercurialis annua]	2959898
962	<i>Metapenaeus ensis</i>	Shrimp	Unassigned	Tropomyosin (Allergen Met e 1) (Met e I)	6094504
963	<i>Mimachlamys nobilis</i>	Noble scallop	Unassigned	tropomyosin [Chlamys nobilis]	9954253
964	<i>Mus musculus</i>	Mouse	Mus m 1	Major urinary protein 6 precursor (MUP 6) (Alpha-2U-globulin) (Group 1, BS6) (Allergen Mus m 1)	20178291
965	<i>Musa acuminata</i>	Banana	Mus xp 1	profilin [Musa acuminata]	14161635

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
966	<i>Myrmecia pilosula</i>	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
967	<i>Myrmecia pilosula</i>	Jumper ant	Myr p 2	major allergen Myr p II	1587177
968	<i>Myrmecia pilosula</i>	Jumper ant	Unassigned	Myr p I=allergenic polypeptide {N-terminal} [Myrmecia pilosula=jumper ants, venom, Peptide Partial, 112 aa]	1911819
969	<i>Myrmecia pilosula</i>	Jumper ant	Myr p 2	Allergen Myr p 2 precursor (Myr p II)	2498604
970	<i>Neptunea polycostata</i>	Tabled welk	Unassigned	tropomyosin [Neptunea polycostata]	219806590
971	<i>Nicotiana tabacum</i>	Tobacco	Unassigned	villin 1 [Nicotiana tabacum]	57283137
972	<i>Nicotiana tabacum</i>	Tobacco	Unassigned	villin 2 [Nicotiana tabacum]	57283139
973	<i>Octopus vulgaris</i>	Octopus	Unassigned	tropomyosin [Octopus vulgaris]	83715936
974	<i>Olea europaea</i>	Olive tree	Unassigned	major allergen OLE16 - common olive (fragment)	1362128
975	<i>Olea europaea</i>	Olive tree	Unassigned	major allergen OLE17 - common olive (fragment)	1362129
976	<i>Olea europaea</i>	Olive tree	Unassigned	major allergen OLE19 - common olive (fragment)	1362130
977	<i>Olea europaea</i>	Olive tree	Ole e 1.0104	major allergen OLE1c - common olive (fragment)	1362131
978	<i>Olea europaea</i>	Olive tree	Ole e 1	major allergen OLE20 - common olive (fragment)	1362132
979	<i>Olea europaea</i>	Olive tree	Unassigned	major allergen OLE26 - common olive (fragment)	1362133
980	<i>Olea europaea</i>	Olive tree	Unassigned	major allergen OLE33/OLE37 - common olive (fragment)	1362134
981	<i>Olea europaea</i>	Olive tree	Ole e 1.0102	major allergen OLE3c - common olive	1362135
982	<i>Olea europaea</i>	Olive tree	Ole e 1.0103	major allergen OLE5c - common olive	1362136
983	<i>Olea europaea</i>	Olive tree	Unassigned	major allergen OLE6 - common olive (fragment)	1362137
984	<i>Olea europaea</i>	Olive tree	Ole e 1.0105	Ole e 1.0102 protein [Olea europaea]	2465127

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
985	<i>Olea europaea</i>	Olive tree	Ole e 1.0106	Ole e 1.0103 protein [Olea europaea]	2465129
986	<i>Olea europaea</i>	Olive tree	Ole e 1.0107	Ole e 1 protein [Olea europaea]	2465131
987	<i>Olea europaea</i>	Olive tree	Ole e 3	calcium-binding pollen allergen [Olea europaea]	3337403
988	<i>Olea europaea</i>	Olive tree	Ole e 2	Profilin-1 (Pollen allergen Ole e 2)	3914426
989	<i>Olea europaea</i>	Olive tree	Ole e 2	Profilin-2 (Pollen allergen Ole e 2)	3914427
990	<i>Olea europaea</i>	Olive tree	Ole e 2	Profilin-3 (Pollen allergen Ole e 2)	3914428
991	<i>Olea europaea</i>	Olive tree	Ole e 8	calcium-binding protein [Olea europaea]	6901654
992	<i>Olea europaea</i>	Olive tree	Ole e 1.0101	main olive allergen [Olea europaea]	13195753
993	<i>Olea europaea</i>	Olive tree	Ole e 9	beta-1,3-glucanase-like protein [Olea europaea]	14279169
994	<i>Olea europaea</i>	Olive tree	Ole e 6	Pollen allergen Ole e 6	14423643
995	<i>Olea europaea</i>	Olive tree	Ole e 8	Calcium-binding allergen Ole e 8 (PCA18/PCA23)	14423648
996	<i>Olea europaea</i>	Olive tree	Ole e 1	Major pollen allergen (Allergen Ole e 1) (Ole e I)	14424429
997	<i>Olea europaea</i>	Olive tree	Ole e 7	Pollen allergen Ole e 7 (Ole e VII)	22002032
998	<i>Olea europaea</i>	Olive tree	Ole e 10	allergen Ole e 10 [Olea europaea]	29465664
999	<i>Olea europaea</i>	Olive tree	Ole e 4	[Segment 1 of 2] Major pollen allergen Ole e 4 (Ole e IV)	32363448
1000	<i>Olea europaea</i>	Olive tree	Ole e 4	[Segment 2 of 2] Major pollen allergen Ole e 4 (Ole e IV)	32363449
1001	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33325115
1002	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329732
1003	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329738
1004	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329744
1005	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329748
1006	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329750

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1007	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329752
1008	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329754
1009	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329756
1010	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	33329758
1011	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	37548753
1012	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	37724593
1013	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	37724597
1014	<i>Olea europaea</i>	Olive tree	Ole e 3	Ole e 3 allergen [Olea europaea]	37725377
1015	<i>Olea europaea</i>	Olive tree	Ole e 5	Superoxide dismutase [Cu-Zn] (Allergen Ole e 5) (Ole e V)	122064581
1016	<i>Olea europaea</i>	Olive tree	Unassigned	pollen allergen Ole e 5 [Olea europaea]	145313972
1017	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	145313982
1018	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	145313984
1019	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	145313988
1020	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	145313990
1021	<i>Olea europaea</i>	Olive tree	Unassigned	major pollen allergen Ole e 1 [Olea europaea]	145313992
1022	<i>Olea europaea</i>	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347106
1023	<i>Olea europaea</i>	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347108
1024	<i>Olea europaea</i>	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347112
1025	<i>Olea europaea</i>	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347120
1026	<i>Olea europaea</i>	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347122
1027	<i>Olea europaea</i>	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347124

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1028	<i>Olea europaea</i>	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347126
1029	<i>Olea europaea</i>	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347130
1030	<i>Olea europaea</i>	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347134
1031	<i>Olea europaea</i>	Olive tree	Unassigned	allergen Ole e 5 [Olea europaea]	160347138
1032	<i>Olea europaea</i>	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962543
1033	<i>Olea europaea</i>	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962547
1034	<i>Olea europaea</i>	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962557
1035	<i>Olea europaea</i>	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962577
1036	<i>Olea europaea</i>	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962583
1037	<i>Olea europaea</i>	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962587
1038	<i>Olea europaea</i>	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962591
1039	<i>Olea europaea</i>	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962597
1040	<i>Olea europaea</i>	Olive tree	Unassigned	Ole e 5 olive pollen allergen [Olea europaea]	160962611
1041	<i>Olea europaea</i>	Olive tree	Unassigned	Chain A, Solution Structure Of The C-Terminal Domain Ole E 9	166235350
1042	<i>Ommastrephes bartramii</i>	Squid	Unassigned	tropomyosin [Ommastrephes bartramii]	83715934
1043	<i>Oratosquilla oratoria</i>	Fungus	Unassigned	tropomyosin [Oratosquilla oratoria]	162286975
1044	<i>Oryza sativa</i>	Rice	Ory s 1	Ory s 1	1173557
1045	<i>Oryza sativa</i>	Rice	Unassigned	beta-expansin [Oryza sativa]	8118439

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1046	<i>Oryza sativa</i>	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
1047	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	218193
1048	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	218197
1049	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	1304216
1050	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	1304217
1051	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	1304218
1052	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	1398913
1053	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	1398915
1054	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	1398916
1055	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa (japonica cultivar-group)]	1398918
1056	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	allergenic protein [Oryza sativa]	2827316
1057	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	glyoxalase I [Oryza sativa (japonica cultivar-group)]	16580747
1058	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	allergen RA5B precursor [Oryza sativa (japonica cultivar-group)]	23495787
1059	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	putative allergenic protein [Oryza sativa (japonica cultivar-group)]	23616947
1060	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	allergen RA16 [Oryza sativa (japonica cultivar-group)]	23616954

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1061	<i>Oryza sativa</i> (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 l)	109913547
1062	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	Seed allergenic protein RAG1 precursor (Seed allergenic protein RA17)	114152864
1063	<i>Oryza sativa</i> (japonica cultivar-group)	Rice	Unassigned	Seed allergenic protein RAG2 precursor (Seed allergenic protein RA14)	114152865
1064	<i>Pachycondyla chinensis</i>	Ant	Unassigned	Pac c 3 allergen [Pachycondyla chinensis]	169822894
1065	<i>Pandalus eous</i>	Fungus	Unassigned	tropomyosin fast isoform [Pandalus eous]	125995161
1066	<i>Panulirus stimpsoni</i>	Lobster	Unassigned	Tropomyosin (Allergen Pan s 1) (Pan s l)	14285797
1067	<i>Paralithodes camtschaticus</i>	Crab	Unassigned	tropomyosin fast isoform [Paralithodes camtschaticus]	125995163
1068	<i>Paralithodes camtschaticus</i>	Crab	Unassigned	tropomyosin slow-tonic isoform [Paralithodes camtschaticus]	125995165
1069	<i>Parietaria judaica</i>	Weed	Par j 1	major allergen Par j I	741844
1070	<i>Parietaria judaica</i>	Weed	Par j 2.0102	P8 protein [Parietaria judaica]	1532056
1071	<i>Parietaria judaica</i>	Weed	Par j 1.0102	P9 protein [Parietaria judaica]	1532058
1072	<i>Parietaria judaica</i>	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
1073	<i>Parietaria judaica</i>	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
1074	<i>Parietaria judaica</i>	Weed	Par j 1.0101	Probable nonspecific lipid-transfer protein (LTP) (Major pollen allergen Par j 1.0101) (Par j I) (P5 protein)	3915783
1075	<i>Parietaria judaica</i>	Weed	Par j 3	Profilin-2 (Pollen allergen Par j 3)	14423869
1076	<i>Parietaria judaica</i>	Weed	Par j 3	Profilin-1 (Pollen allergen Par j 3)	14423876

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1077	<i>Parietaria officinalis</i>	Weed	Par o 1	mAb 2F9-reactive major allergen {N-terminal} [Parietaria officinalis, pollen, Peptide Partial, 17 aa]	1311509
1078	<i>Parietaria officinalis</i>	Weed	Par o 1	mAb 8C7-reactive major allergen {N-terminal, band 1} [Parietaria officinalis, pollen, Peptide Partial, 15 aa]	1311510
1079	<i>Parietaria officinalis</i>	Weed	Par o 1	mAb 8C7-reactive major allergen {N-terminal, band 2} [Parietaria officinalis, pollen, Peptide Partial, 15 aa]	1311511
1080	<i>Parietaria officinalis</i>	Weed	Par o 1	mAb 3F8-reactive major allergen {N-terminal} [Parietaria officinalis, pollen, Peptide Partial, 15 aa]	1311512
1081	<i>Parietaria officinalis</i>	Weed	Par o 1	mAb 8B6-reactive major allergen {N-terminal} [Parietaria officinalis, pollen, Peptide Partial, 30 aa]	1311513
1082	<i>Parietaria officinalis</i>	Weed	Unassigned	Par o 1a=acidic allergen isoform {N-terminal} [Parietaria officinalis=pellitory, pollen, Peptide Partial, 25 aa]	1836010
1083	<i>Parietaria officinalis</i>	Weed	Par o 1	Par o 1b=basic allergen isoform {N-terminal} [Parietaria officinalis=pellitory, pollen, Peptide Partial, 24 aa]	1836011
1084	<i>Parietaria officinalis</i>	Weed	Par o 1	Pollen major allergen Par o I	75139847
1085	<i>Paspalum notatum</i>	Bahia grass	Unassigned	Pas n 1 allergen precursor [Paspalum notatum]	168419914
1086	<i>Penaeus monodon</i>	Black tiger shrimp	Pen m 2	allergen Pen m 2 [Penaeus monodon]	27463265
1087	<i>Penaeus monodon</i>	Black tiger shrimp	Unassigned	tropomyosin fast isoform [Penaeus monodon]	125995157
1088	<i>Penicillium brevicompactum</i>	Fungus	Unassigned	60S acidic ribosomal P1 phosphoprotein Pen b 26 [Penicillium brevicompactum]	59894749
1089	<i>Penicillium chrysogenum</i>	Fungus	Pen ch 20	68 kDa allergen [Penicillium chrysogenum]	999009

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1090	<i>Penicillium chrysogenum</i>	Fungus	Pen ch 13	allergen Pen n 13 [Penicillium chrysogenum]	6684758
1091	<i>Penicillium chrysogenum</i>	Fungus	Pen ch 18	allergen Pen n 18 [Penicillium chrysogenum]	7963902
1092	<i>Penicillium chrysogenum</i>	Fungus	Pen ch 18	vacuolar serine protease [Penicillium chrysogenum]	14215732
1093	<i>Penicillium chrysogenum</i>	Fungus	Pen ch 13	alkaline serine protease [Penicillium chrysogenum]	21069093
1094	<i>Penicillium citrinum</i>	Fungus	Unassigned	Pen c 1; alkaline serine protease [Penicillium citrinum]	4587983
1095	<i>Penicillium citrinum</i>	Fungus	Unassigned	alkaline serine protease Pen c2 [Penicillium citrinum]	4588118
1096	<i>Penicillium citrinum</i>	Fungus	Pen c 3	peroxisomal membrane protein [Penicillium citrinum]	5326864
1097	<i>Penicillium citrinum</i>	Fungus	Unassigned	vacuolar serine protease [Penicillium citrinum]	12005501
1098	<i>Penicillium citrinum</i>	Fungus	Pen c 19	Heat shock 70 kDa protein (Allergen Pen c 19)	14423733
1099	<i>Penicillium citrinum</i>	Fungus	Pen c 24	unknown [Penicillium citrinum]	38326693
1100	<i>Penicillium citrinum</i>	Fungus	Unassigned	Enolase (2-phosphoglycerate dehydratase) (2-phospho-D-glycerate hydro-lyase) (Allergen Pen c 22)	74664773
1101	<i>Penicillium oxalicum</i>	Fungus	Pen o 18	vacuolar serine protease [Penicillium oxalicum]	12005497
1102	<i>Periplaneta americana</i>	American cockroach	Per a 3.0201	allergen [Periplaneta americana]	1531589
1103	<i>Periplaneta americana</i>	American cockroach	Per a 3.0202	allergen [Periplaneta americana]	1580794
1104	<i>Periplaneta americana</i>	American cockroach	Per a 3.0203	allergen [Periplaneta americana]	1580797
1105	<i>Periplaneta americana</i>	American cockroach	Per a 1	Cr-P11 allergen [Periplaneta americana]	2231297
1106	<i>Periplaneta americana</i>	American cockroach	Per a 1.0104	Cr-P11 allergen [Periplaneta americana]	2253610
1107	<i>Periplaneta americana</i>	American cockroach	Per a 1	Cr-P11 [Periplaneta americana]	2580504
1108	<i>Periplaneta americana</i>	American cockroach	Per a 3.0101	Allergen Cr-P1 precursor (Allergen Per a 3)	2833325

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1109	<i>Periplaneta americana</i>	American cockroach	Per a 1.0102	allergen [Periplaneta americana]	2897849
1110	<i>Periplaneta americana</i>	American cockroach	Per a 1.0101	major allergen Per a 1.0101 [Periplaneta americana]	4240399
1111	<i>Periplaneta americana</i>	American cockroach	Per a 7.0101	tropomyosin [Periplaneta americana]	4378573
1112	<i>Periplaneta americana</i>	American cockroach	Unassigned	Tropomyosin (Major allergen Per a 7)	14423957
1113	<i>Periplaneta americana</i>	American cockroach	Unassigned	major allergen Per a 1.0105 [Periplaneta americana]	30144660
1114	<i>Periplaneta americana</i>	American cockroach	Unassigned	Per a 4 allergen [Periplaneta americana]	60678787
1115	<i>Periplaneta americana</i>	American cockroach	Unassigned	Per a 4 allergen variant 1 [Periplaneta americana]	212675312
1116	<i>Periplaneta americana</i>	American cockroach	Unassigned	Chain A, Crystal Structure Of Major Allergens, Per A 4 From Cockroaches	215794707
1117	<i>Periplaneta fuliginosa</i>	Smokybrown cockroach	Unassigned	tropomyosin [Periplaneta fuliginosa]	19310971
1118	<i>Perna viridis</i>	Asian green mussel	Unassigned	tropomyosin [Perna viridis]	9954251
1119	<i>Persea americana</i>	Avocado	Pers a 1	endochitinase [Persea americana]	3201547
1120	<i>Phalaris aquatica</i>	Canary grass	Unassigned	Pha a I=34 kda pollen allergen {N-terminal} [Phalaris aquatica=canary grass, Peptide Partial, 20 aa]	409328
1121	<i>Phalaris aquatica</i>	Canary grass	Pha a 1	Major pollen allergen Pha a 1 precursor (Pha a I)	2498576
1122	<i>Phalaris aquatica</i>	Canary grass	Unassigned	Major pollen allergen Pha a 5.1 precursor (Pha A 5) (Clone 28)	2498577
1123	<i>Phalaris aquatica</i>	Canary grass	Unassigned	Major pollen allergen Pha a 5.2 precursor (Pha a 5) (Clone 14)	2498578
1124	<i>Phalaris aquatica</i>	Canary grass	Unassigned	Major pollen allergen Pha a 5.3 precursor (Pha a 5) (Clone 29)	2498579
1125	<i>Phalaris aquatica</i>	Canary grass	Unassigned	Major pollen allergen Pha a 5.4 (Pha a 5) (Clone 5)	2498580
1126	<i>Phleum pratense</i>	Common timothy	Phl p 5.0101	Phlp5 [Phleum pratense]	398830
1127	<i>Phleum pratense</i>	Common timothy	Phl p 5	PHLP5A protein - common timothy (fragment)	422005

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1128	<i>Phleum pratense</i>	Common timothy	Phl p 12	Profilin-1 (Pollen allergen Phl p 12) (Phl p 11)	464471
1129	<i>Phleum pratense</i>	Common timothy	Phl p 5	allergen Phl p Vb - common timothy	481397
1130	<i>Phleum pratense</i>	Common timothy	Unassigned	major allergen Phl p Va	1092249
1131	<i>Phleum pratense</i>	Common timothy	Unassigned	Pollen allergen Phl p 1 precursor (Phl p I)	1171008
1132	<i>Phleum pratense</i>	Common timothy	Unassigned	Pollen allergen Phl p 2 precursor (Phl p II)	1171009
1133	<i>Phleum pratense</i>	Common timothy	Unassigned	allergen Phl p I	1582250
1134	<i>Phleum pratense</i>	Common timothy	Phl p 5.0202	major allergen Phl p 5 [Phleum pratense]	1684718
1135	<i>Phleum pratense</i>	Common timothy	Phl p 5.0104	major allergen Phl p 5 [Phleum pratense]	1684720
1136	<i>Phleum pratense</i>	Common timothy	Phl p 5	Major Pollen Allergen Phl p Va [Phleum pratense]	2398757
1137	<i>Phleum pratense</i>	Common timothy	Phl p 12	profilin 3 [Phleum pratense]	2415700
1138	<i>Phleum pratense</i>	Common timothy	Phl p 12	profilin 4 [Phleum pratense]	2415702
1139	<i>Phleum pratense</i>	Common timothy	Phl p 5	Pollen allergen Phl p 5b precursor (Phl p Vb)	2851457
1140	<i>Phleum pratense</i>	Common timothy	Phl p 6	Phl p6 allergen [Phleum pratense]	3004465
1141	<i>Phleum pratense</i>	Common timothy	Phl p 6	Phl p6 allergen [Phleum pratense]	3004467
1142	<i>Phleum pratense</i>	Common timothy	Unassigned	Phl p6 IgE binding fragment [Phleum pratense]	3004469
1143	<i>Phleum pratense</i>	Common timothy	Phl p 5.0105	major allergen Phl p 5 [Phleum pratense]	3135497
1144	<i>Phleum pratense</i>	Common timothy	Phl p 5.0106	major allergen Phl p 5 [Phleum pratense]	3135499
1145	<i>Phleum pratense</i>	Common timothy	Phl p 5.0107	major allergen Phl p 5 [Phleum pratense]	3135501
1146	<i>Phleum pratense</i>	Common timothy	Phl p 5.0108	major allergen Phl p 5 [Phleum pratense]	3135503
1147	<i>Phleum pratense</i>	Common timothy	Phl p 5.0103	group V allergen Phl p 5.0103 precursor [Phleum pratense]	3309039
1148	<i>Phleum pratense</i>	Common timothy	Unassigned	group V allergen Phl p 5.0203 precursor [Phleum pratense]	3309041
1149	<i>Phleum pratense</i>	Common timothy	Unassigned	group V allergen Phl p 5.0206 precursor [Phleum pratense]	3309045
1150	<i>Phleum pratense</i>	Common timothy	Unassigned	group V allergen Phl p 5.0207 precursor [Phleum pratense]	3309047

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1151	<i>Phleum pratense</i>	Common timothy	Phl p 1.0101	pollen allergen Phl pl [Phleum pratense]	3901094
1152	<i>Phleum pratense</i>	Common timothy	Phl p 13	polygalacturonase [Phleum pratense]	4826572
1153	<i>Phleum pratense</i>	Common timothy	Phl p 5	group V allergen Phl p 5 precursor [Phleum pratense]	13430402
1154	<i>Phleum pratense</i>	Common timothy	Unassigned	Polcalcin Phl p 7 (Calcium-binding pollen allergen Phl p 7) (P7)	14423846
1155	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725606
1156	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725608
1157	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725610
1158	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725612
1159	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725614
1160	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725616
1161	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725618
1162	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725620
1163	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725622
1164	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725624
1165	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725626
1166	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725628
1167	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725630
1168	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	21725632

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1169	<i>Phleum pratense</i>	Common timothy	Phl p 1	Chain A, Crystal Structure Of Phl P 1, A Major Timothy Grass Pollen Allergen	28373838
1170	<i>Phleum pratense</i>	Common timothy	Unassigned	Chain N, Crystal Structure Of Phl P 6, A Major Timothy Grass Pollen Allergen Co-Crystallized With Zinc	28374072
1171	<i>Phleum pratense</i>	Common timothy	Phl p 5	Chain A, Crystal Structure Of The Functional Domain Of The Major Grass Pollen Allergen Phl P 5b	28948464
1172	<i>Phleum pratense</i>	Common timothy	Unassigned	phl p5a allergen precursor [Phleum pratense]	29500897
1173	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	45108967
1174	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	45108973
1175	<i>Phleum pratense</i>	Common timothy	Unassigned	unnamed protein product [Phleum pratense]	45823012
1176	<i>Phleum pratense</i>	Common timothy	Unassigned	Pollen allergen Phl p 11	47606039
1177	<i>Phleum pratense</i>	Common timothy	Unassigned	pollen allergen Phl p 4 [Phleum pratense]	54144332
1178	<i>Phleum pratense</i>	Common timothy	Phl p 5	Pollen allergen Phl p V	75139900
1179	<i>Phleum pratense</i>	Common timothy	Unassigned	major pollen allergen Phl p 4 precursor [Phleum pratense]	82492267
1180	<i>Phleum pratense</i>	Common timothy	Unassigned	pollen allergen Phl p 4.0102 [Phleum pratense]	189014266
1181	<i>Phleum pratense</i>	Common timothy	Unassigned	pollen allergen Phl p 4.0202 [Phleum pratense]	189014268
1182	<i>Phleum pratense</i>	Common timothy	Unassigned	pollen allergen Phl p 4.0203 [Phleum pratense]	189014270
1183	<i>Phleum pratense</i>	Common timothy	Unassigned	pollen allergen Phl p 4.0204 [Phleum pratense]	189014272
1184	<i>Phoenix dactylifera</i>	Date palm	Pho d 2	profilin [Phoenix dactylifera]	21322677
1185	<i>Pistacia vera</i>	Pistachio	Unassigned	Pis v 1 allergen 2S albumin [Pistacia vera]	110349081
1186	<i>Pistacia vera</i>	Pistachio	Unassigned	Pis v 2.0101 allergen11S globulin precursor [Pistacia vera]	110349083

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1187	<i>Pistacia vera</i>	Pistachio	Unassigned	Pis v 2.0201 allergen 11S globulin precursor [Pistacia vera]	110349085
1188	<i>Pistacia vera</i>	Pistachio	Unassigned	vicilin [Pistacia vera]	133711974
1189	<i>Pistacia vera</i>	Pistachio	Unassigned	11S globulin [Pistacia vera]	156001070
1190	<i>Pisum sativum</i>	Pea	Pis s 1	Vicilin [Pisum sativum]	42414627
1191	<i>Pisum sativum</i>	Pea	Pis s 1	Vicilin [Pisum sativum]	42414629
1192	<i>Plantago lanceolata</i>	Narrow-leaved plantain	Pla l 1	plantain pollen major allergen, Pla l 1.0101 [Plantago lanceolata]	14422359
1193	<i>Plantago lanceolata</i>	Narrow-leaved plantain	Pla l 1	plantain pollen major allergen, Pla l 1.0102 [Plantago lanceolata]	14422361
1194	<i>Plantago lanceolata</i>	Narrow-leaved plantain	Pla l 1	plantain pollen major allergen, Pla l 1.0103 [Plantago lanceolata]	14422363
1195	<i>Plantago lanceolata</i>	Narrow-leaved plantain	Unassigned	unnamed protein product [Plantago lanceolata]	29163773
1196	<i>Platanus orientalis</i>	Plane tree	Unassigned	pollen allergen Pla o 1 [Platanus orientalis]	162949336
1197	<i>Platanus x acerifolia</i>	London plane tree	Unassigned	Putative invertase inhibitor precursor (Pollen allergen Pla a 1)	29839547
1198	<i>Platanus x acerifolia</i>	London plane tree	Pla a 2	polygalacturonase [Platanus x acerifolia]	49523394
1199	<i>Plodia interpunctella</i>	Indian meal moth	Unassigned	arginine kinase [Plodia interpunctella]	15886861
1200	<i>Poa pratensis</i>	Kentucky bluegrass	Unassigned	Pollen allergen KBG 31 precursor (Pollen allergen Poa p 9) (Poa p IX)	113560
1201	<i>Poa pratensis</i>	Kentucky bluegrass	Unassigned	Pollen allergen KBG 41 precursor (Pollen allergen Poa p 9) (Poa p IX)	113561
1202	<i>Poa pratensis</i>	Kentucky bluegrass	Unassigned	Pollen allergen KBG 60 precursor (Pollen allergen Poa p 9) (Poa p IX)	113562
1203	<i>Poa pratensis</i>	Kentucky bluegrass	Poa p 1	pollen allergen Poa-pl - Kentucky bluegrass (fragment)	280414
1204	<i>Poa pratensis</i>	Kentucky bluegrass	Poa p 1	pollen allergen Poa p l - Kentucky bluegrass (fragment)	320620
1205	<i>Poa pratensis</i>	Kentucky bluegrass	Unassigned	pollen allergen (clone 7.2) - Kentucky bluegrass (fragment)	539056
1206	<i>Poa pratensis</i>	Kentucky bluegrass	Unassigned	pollen allergen (group II) [Poa pratensis]	4007655
1207	<i>Poa pratensis</i>	Kentucky bluegrass	Poa p 1	group I pollen allergen [Poa pratensis]	4090265

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1208	<i>Poa pratensis</i>	Kentucky bluegrass	Poa p 5	pollen allergen Poa p 5 [Poa pratensis]	11991227
1209	<i>Polistes annularis</i>	Paper wasp	Pol a 5	allergen 5	160780
1210	<i>Polistes annularis</i>	Paper wasp	Pol a 2	Hyaluronoglucosaminidase precursor (Hyaluronidase) (Allergen Pol a 2)	14423735
1211	<i>Polistes annularis</i>	Paper wasp	Pol a 1	Phospholipase A1 (Allergen Pol a 1)	14423833
1212	<i>Polistes dominulus</i>	Paper wasp	Unassigned	venom serine protease precursor [Polistes dominulus]	30909091
1213	<i>Polistes dominulus</i>	Paper wasp	Unassigned	venom phospholipase A1 1 precursor [Polistes dominulus]	45510887
1214	<i>Polistes dominulus</i>	Paper wasp	Unassigned	venom phospholipase A1 2 precursor [Polistes dominulus]	45510889
1215	<i>Polistes dominulus</i>	Paper wasp	Unassigned	venom phospholipase A1 3 precursor [Polistes dominulus]	45510891
1216	<i>Polistes dominulus</i>	Paper wasp	Unassigned	venom phospholipase A1 4 precursor [Polistes dominulus]	45510893
1217	<i>Polistes dominulus</i>	Paper wasp	Pol d 5	allergen Pol d 5 precursor [Polistes dominulus]	51093377
1218	<i>Polistes exclamans</i>	Paper wasp	Pol e 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Pol e 5) (Pol e V)	549187
1219	<i>Polistes exclamans</i>	Paper wasp	Unassigned	allergen Pol e 5 precursor [Polistes exclamans]	51093375
1220	<i>Polistes fuscatus</i>	Paper wasp	Pol f 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Pol f 5) (Pol f V)	549188
1221	<i>Polistes gallicus</i>	Paper wasp	Pol g 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Pol g 5)	25091511
1222	<i>Polistes gallicus</i>	Paper wasp	Unassigned	Phospholipase A1 (Allergen Pol g 1)	41017429
1223	<i>Prunus armeniaca</i>	Apricot	Pru ar 3	Nonspecific lipid-transfer protein 1 (LTP 1) (Major allergen Pru ar 3)	7404406
1224	<i>Prunus avium</i>	Cherry	Pru av 2	thaumatin-like protein precursor	1144346
1225	<i>Prunus avium</i>	Cherry	Pru av 1	cherry-allergen PRUA1	1513216
1226	<i>Prunus avium</i>	Cherry	Pru av 4	profilin [Prunus avium]	4761582
1227	<i>Prunus avium</i>	Cherry	Pru av 3	lipid transfer protein precursor [Prunus avium]	6715520

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1228	<i>Prunus avium</i>	Cherry	Pru av 1	major cherry allergen Pru av 1.0201 [Prunus avium]	44409451
1229	<i>Prunus avium</i>	Cherry	Pru av 1	major cherry allergen Pru av 1.0202 [Prunus avium]	44409474
1230	<i>Prunus avium</i>	Cherry	Pru av 1	major cherry allergen Pru av 1.0203 [Prunus avium]	44409496
1231	<i>Prunus avium</i>	Cherry	Unassigned	Chain A, Solution Structure Of The Major Cherry Allergen Pru Av 1 Mutant E45w	159162378
1232	<i>Prunus domestica</i>	Plum	Pru d 3	Nonspecific lipid-transfer protein 1 (LTP 1) (Major allergen Pru d 3)	9297015
1233	<i>Prunus dulcis</i>	Almond	Pru du 4	profilin [Prunus dulcis]	24473794
1234	<i>Prunus dulcis</i>	Almond	Unassigned	Seed allergenic protein 2 (Conglutin gamma) (Allergen Pru du ?)	75107131
1235	<i>Prunus dulcis x Prunus persica</i>	Plum	Unassigned	putative allergen Pru du 4.01 [Prunus dulcis x Prunus persica]	190613933
1236	<i>Prunus dulcis x Prunus persica</i>	Plum	Unassigned	putative allergen Pru du 4.02 [Prunus dulcis x Prunus persica]	190613937
1237	<i>Prunus persica</i>	Peach	Pru p 3	Nonspecific lipid-transfer protein 1 (LTP 1) (Major allergen Pru p 3) (Pru p 1)	3287877
1238	<i>Prunus persica</i>	Peach	Pru p 4.01	profilin [Prunus persica]	27528310
1239	<i>Prunus persica</i>	Peach	Pru p 4.02	profilin [Prunus persica]	27528312
1240	<i>Prunus persica</i>	Peach	Unassigned	lipid transfer protein 1 precursor [Prunus persica]	54793477
1241	<i>Prunus persica</i>	Peach	Unassigned	major allergen Pru p 1 [Prunus persica]	82492265
1242	<i>Prunus persica</i>	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
1243	<i>Pseudocardium sachalinensis</i>	Surf clam	Unassigned	tropomyosin [Pseudocardium sachalinensis]	219806598
1244	<i>Pyrus communis</i>	Pear	Pyr c 1	major allergen Pyrc1 [Pyrus communis]	3044216
1245	<i>Pyrus communis</i>	Pear	Pyr c 5	isoflavone reductase related protein [Pyrus communis]	3243234

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1246	<i>Pyrus communis</i>	Pear	Pyr c 4	profilin [Pyrus communis]	4761580
1247	<i>Quercus alba</i>	Oak	Que a 1	major pollen allergen Que a 1 - white oak (fragment)	543675
1248	<i>Quercus alba</i>	Oak	Unassigned	pollen allergen Que a 1 isoform [Quercus alba]	167472847
1249	<i>Quercus alba</i>	Oak	Unassigned	pollen allergen Que a 1 isoform [Quercus alba]	167472849
1250	<i>Rana esculenta</i>	Frog	Ran e 1	parvalbumin alpha [Rana esculenta]	20796729
1251	<i>Rana esculenta</i>	Frog	Ran e 2	parvalbumin beta protein [Rana esculenta]	20797081
1252	<i>Rana sp. CH-2001</i>	Frog	Unassigned	parvalbumin alpha [Rana sp. CH-2001]	20796733
1253	<i>Rana sp. CH-2001</i>	Frog	Unassigned	parvalbumin beta protein [Rana sp. CH-2001]	20797085
1254	<i>Rattus norvegicus</i>	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
1255	<i>Rattus norvegicus</i>	Rat	Rat n 1	Alpha-2u globulin	81890324
1256	<i>Rattus norvegicus</i>	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
1257	<i>Rhodotorula mucilaginosa</i>	Fungus	Unassigned	Enolase (2-phosphoglycerate dehydratase) (2-phospho-D-glycerate hydro-lyase) (Allergen Rho m 1)	37078092
1258	<i>Rhodotorula mucilaginosa</i>	Fungus	Unassigned	vacuolar serine protease [Rhodotorula mucilaginosa]	54654335
1259	<i>Ricinus communis</i>	Castor bean	Ric c 1	2S albumin precursor (Allergen Ric c 1)	112762
1260	<i>Salmo salar</i>	Salmon	Sal s 1	Parvalbumin beta 1 (Major allergen Sal s 1)	2493445
1261	<i>Salmo salar</i>	Salmon	Sal s 1	Parvalbumin beta 2 (Major allergen Sal s 1)	18281421
1262	<i>Salmo salar</i>	Salmon	Unassigned	Parvalbumin beta 1 [Salmo salar]	209734468

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1263	<i>Salsola kali</i>	Thistle	Sal k 1	[Segment 1 of 4] Pollen allergen Sal k 1	25090948
1264	<i>Salsola kali</i>	Thistle	Sal k 1	[Segment 2 of 4] Pollen allergen Sal k 1	25090949
1265	<i>Salsola kali</i>	Thistle	Sal k 1	[Segment 3 of 4] Pollen allergen Sal k 1	25090950
1266	<i>Salsola kali</i>	Thistle	Sal k 1	[Segment 4 of 4] Pollen allergen Sal k 1	25090951
1267	<i>Salsola kali</i>	Thistle	Unassigned	pectin-methyltransferase precursor [ <i>Salsola kali</i> ]	51242679
1268	<i>Salsola kali</i>	Thistle	Unassigned	pectin methylesterase allergenic protein [ <i>Salsola kali</i> ]	59895728
1269	<i>Salsola kali</i>	Thistle	Unassigned	pectin methylesterase allergenic protein [ <i>Salsola kali</i> ]	59895730
1270	<i>Salsola kali</i>	Thistle	Unassigned	Sal k 1 pollen allergen [ <i>Salsola kali</i> ]	225810597
1271	<i>Sarcoptes scabiei</i> <i>type hominis</i>	Scabies mite	Unassigned	glutathione S-transferase [ <i>Sarcoptes scabiei</i> <i>type hominis</i> ]	27462836
1272	<i>Sarcoptes scabiei</i> <i>type hominis</i>	Scabies mite	Unassigned	glutathione transferase mu class Yv5004H11 [ <i>Sarcoptes scabiei</i> <i>type hominis</i> ]	60920770
1273	<i>Sardinops sagax</i>	Pacific sardine	Unassigned	parvalbumin [ <i>Sardinops sagax</i> ]	193247972
1274	<i>Scapharca broughtonii</i>	Clam	Unassigned	tropomyosin [ <i>Scapharca broughtonii</i> ]	219806592
1275	<i>Schedonorus arundinaceus</i>	Tall fescue	Unassigned	pollen allergen Fes e l type A - reed fescue (fragment)	320610
1276	<i>Schedonorus arundinaceus</i>	Tall fescue	Unassigned	pollen allergen Fes e l type B - reed fescue (fragment)	320611
1277	<i>Schedonorus arundinaceus</i>	Tall fescue	Unassigned	Group I allergen FeS e l, pollen	75139991
1278	<i>Schistosoma japonicum</i>	Schistosoma	Unassigned	22.6 kDa tegumental antigen [ <i>Schistosoma japonicum</i> ]	2739154
1279	<i>Schistosoma japonicum</i>	Schistosoma	Unassigned	hypothetical protein, putative Profilin/allergen [ <i>Schistosoma japonicum</i> ]	29841461
1280	<i>Scomber japonicus</i>	Chub mackerel	Unassigned	parvalbumin [ <i>Scomber japonicus</i> ]	29420793
1281	<i>Secale cereale</i>	Rye	Unassigned	pollen allergen Sec c 4 [ <i>Secale cereale</i> ]	55859454
1282	<i>Secale cereale</i>	Rye	Unassigned	pollen allergen Sec c 4 [ <i>Secale cereale</i> ]	55859456
1283	<i>Secale cereale</i>	Rye	Unassigned	30K allergen	75140047

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1284	<i>Secale cereale</i>	Rye	Sec c 1	Major BAKER'S ASTHMA allergen SEC C 1	75198875
1285	<i>Sepia esculenta</i>	Golden cuttlefish	Unassigned	tropomyosin [ <i>Sepia esculenta</i> ]	83715928
1286	<i>Sepioteuthis lessoniana</i>	Fungus	Unassigned	tropomyosin [ <i>Sepioteuthis lessoniana</i> ]	83715930
1287	<i>Sesamum indicum</i>	Sesame	Ses i 2	2S albumin precursor [ <i>Sesamum indicum</i> ]	5381323
1288	<i>Sesamum indicum</i>	Sesame	Ses i 1	2S albumin [ <i>Sesamum indicum</i> ]	13183175
1289	<i>Sesamum indicum</i>	Sesame	Ses i 3	7S globulin [ <i>Sesamum indicum</i> ]	13183177
1290	<i>Sesamum indicum</i>	Sesame	Unassigned	15 kDa oleosin	75315271
1291	<i>Sesamum indicum</i>	Sesame	Unassigned	main allergen 15 kDa oleosin [ <i>Sesamum indicum</i> ]	198250343
1292	<i>Sesamum indicum</i>	Sesame	Unassigned	2S albumin [ <i>Sesamum indicum</i> ]	209165427
1293	<i>Sinapis alba</i>	White mustard	Sin a 1	allergen sin a 1.0104 [ <i>Sinapis alba</i> ]	1009434
1294	<i>Sinapis alba</i>	White mustard	Sin a 1	allergen sin a 1.0105 [ <i>Sinapis alba</i> ]	1009436
1295	<i>Sinapis alba</i>	White mustard	Sin a 1	allergen sin a 1.0106 [ <i>Sinapis alba</i> ]	1009438
1296	<i>Sinapis alba</i>	White mustard	Sin a 1	allergen sin a 1.0107 [ <i>Sinapis alba</i> ]	1009440
1297	<i>Sinapis alba</i>	White mustard	Sin a 1	allergen sin a 1.0108 [ <i>Sinapis alba</i> ]	1009442
1298	<i>Sinapis alba</i>	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
1299	<i>Sinapis alba</i>	White mustard	Unassigned	11S globulin precursor [ <i>Sinapis alba</i> ]	62240390
1300	<i>Sinapis alba</i>	White mustard	Unassigned	11S globulin precursor [ <i>Sinapis alba</i> ]	62240392
1301	<i>Solanum tuberosum</i>	Potato	Unassigned	aspartic proteinase inhibitor [ <i>Solanum tuberosum</i> ]	21413
1302	<i>Solanum tuberosum</i>	Potato	Unassigned	patatin B2 (AA 1 - 386) [ <i>Solanum tuberosum</i> ]	21510
1303	<i>Solanum tuberosum</i>	Potato	Unassigned	patatin [ <i>Solanum tuberosum</i> ]	21512
1304	<i>Solanum tuberosum</i>	Potato	Unassigned	patatin [ <i>Solanum tuberosum</i> ]	21514
1305	<i>Solanum tuberosum</i>	Potato	Sola t 2	Aspartic protease inhibitor 11 (Cathepsin D inhibitor PDI) (Allergen Sola t 2)	124148
1306	<i>Solanum tuberosum</i>	Potato	Unassigned	patatin	169500

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1307	<i>Solanum tuberosum</i>	Potato	Sola t 3	Cysteine protease inhibitor 1 precursor (PCPI 8.3) (P340) (P34021)	20141344
1308	<i>Solanum tuberosum</i>	Potato	Sola t 4	Serine protease inhibitor 7 precursor (PIG) (PIGEN1) (Allergen Sola t 4) (STPIB) (STPIA) (pKEN14-28) (pF4)	20141714
1309	<i>Solanum tuberosum</i>	Potato	Unassigned	profilin-like [ <i>Solanum tuberosum</i> ]	77416979
1310	<i>Solanum tuberosum</i>	Potato	Unassigned	profilin-like protein [ <i>Solanum tuberosum</i> ]	77999277
1311	<i>Solanum tuberosum</i>	Potato	Sola t 1	RecName: Full=Patatin-B1; Flags: Precursor	158517845
1312	<i>Solen strictus</i>	Clam	Unassigned	tropomyosin [ <i>Solen strictus</i> ]	219806602
1313	<i>Solenopsis geminata</i>	Tropical Fire Ant	Sol g 4	venom allergen Sol g 4.01 precursor [ <i>Solenopsis geminata</i> ]	7638028
1314	<i>Solenopsis geminata</i>	Tropical Fire Ant	Sol g 4	venom allergen Sol g 4.02 precursor [ <i>Solenopsis geminata</i> ]	7638030
1315	<i>Solenopsis invicta</i>	Red fire ant	Sol i 2	Venom allergen 2 precursor (Venom allergen II) (Allergen Sol i 2) (Sol i II)	549179
1316	<i>Solenopsis invicta</i>	Red fire ant	Unassigned	Sol i 1=antigen {N-terminal} [ <i>Solenopsis invicta</i> =imported fire ants, venom, Peptide Partial, 58 aa, segment 1 of 5]	1336809
1317	<i>Solenopsis invicta</i>	Red fire ant	Unassigned	Sol i 1=antigen {N-terminal} [ <i>Solenopsis invicta</i> =imported fire ants, venom, Peptide Partial, 25 aa, segment 3 of 5]	1336811
1318	<i>Solenopsis invicta</i>	Red fire ant	Unassigned	Sol i 1=antigen {N-terminal} [ <i>Solenopsis invicta</i> =imported fire ants, venom, Peptide Partial, 26 aa, segment 4 of 5]	1336812
1319	<i>Solenopsis invicta</i>	Red fire ant	Unassigned	Sol i 1=antigen {N-terminal} [ <i>Solenopsis invicta</i> =imported fire ants, venom, Peptide Partial, 26 aa, segment 5 of 5]	1336813
1320	<i>Solenopsis invicta</i>	Red fire ant	Sol i 4	venom allergen Sol i 4.02 precursor [ <i>Solenopsis invicta</i> ]	4038411

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1321	<i>Solenopsis invicta</i>	Red fire ant	Sol i 4	Venom allergen IV precursor (Allergen Sol i 4) (Sol i IV)	14424465
1322	<i>Solenopsis invicta</i>	Red fire ant	Sol i 3	Venom allergen III precursor (Allergen Sol i 3) (Sol i III)	14424466
1323	<i>Solenopsis invicta</i>	Red fire ant	Unassigned	allergen Sol i 1 precursor [Solenopsis invicta]	51093373
1324	<i>Solenopsis richteri</i>	Black fire ant	Unassigned	Venom allergen 2 (Venom allergen II) (Allergen Sol r 2) (Sol r II)	6136162
1325	<i>Solenopsis richteri</i>	Black fire ant	Unassigned	Venom allergen III (Allergen Sol r 3) (Sol r III)	6136163
1326	<i>Staphylococcus aureus</i>	Bacteria	Unassigned	RecName: Full=Enterotoxin type D; AltName: Full=SED; Flags: Precursor	119654
1327	<i>Staphylococcus aureus</i>	Bacteria	Unassigned	RecName: Full=Toxic shock syndrome toxin-1; Short=TSST-1; Flags: Precursor	136457
1328	<i>Staphylococcus aureus</i>	Bacteria	Unassigned	RecName: Full=Enterotoxin type C-2; AltName: Full=SEC2; Flags: Precursor	462026
1329	<i>Staphylococcus aureus</i>	Bacteria	Unassigned	Chain B, Staphylococcal Enterotoxin A	1633233
1330	<i>Staphylococcus aureus</i>	Bacteria	Unassigned	staphylococcal enterotoxin B precursor (SEB) [Staphylococcus aureus]	83308249
1331	<i>Suidasia medanensis</i>	Fungus	Unassigned	group 2 allergen Sui m 2 [Suidasia medanensis]	45738062
1332	<i>Syringa vulgaris</i>	Lilac	Syr v 1.0101	allergen-like protein Syr v I isoform 1 - <i>Syringa vulgaris</i>	631911
1333	<i>Syringa vulgaris</i>	Lilac	Syr v 1.0102	allergen-like protein Syr v I isoform 2 - <i>Syringa vulgaris</i>	631912
1334	<i>Syringa vulgaris</i>	Lilac	Syr v 1.0103	allergen-like protein Syr v I isoform 3 - <i>Syringa vulgaris</i>	631913
1335	<i>Thaumetopoea pityocampa</i>	Pine moth	Tha p 1	Tha p 1	74798355
1336	<i>Theragra chalcogramma</i>	Alaska pollock	Unassigned	parvalbumin [Theragra chalcogramma]	14531018
1337	<i>Theragra chalcogramma</i>	Alaska pollock	Unassigned	parvalbumin [Theragra chalcogramma]	14531020

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1338	<i>Todarodes pacificus</i>	Squid	Unassigned	tropomyosin [Todarodes pacificus]	83715932
1339	<i>Trachurus japonicus</i>	Jack mackerel	Unassigned	dark muscle parvalbumin [Trachurus japonicus]	77799800
1340	<i>Tresus keenae</i>	Horse clam	Unassigned	tropomyosin [Tresus keenae]	219806600
1341	<i>Triatoma protracta</i>	Western conenose	Tri a p 1	procalin [Triatoma protracta]	15426413
1342	<i>Trichophyton rubrum</i>	Fungus	Tri r 4	Tri r 4 allergen [Trichophyton rubrum]	5813788
1343	<i>Trichophyton rubrum</i>	Fungus	Tri r 2	Tri r 2 allergen [Trichophyton rubrum]	5813790
1344	<i>Trichophyton schoenleinii</i>	Fungus	Unassigned	tri s 4 allergen [Trichophyton schoenleinii]	23894227
1345	<i>Trichophyton schoenleinii</i>	Fungus	Unassigned	tri m 2 allergen [Trichophyton schoenleinii]	23894260
1346	<i>Triticum aestivum</i>	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21673
1347	<i>Triticum aestivum</i>	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21701
1348	<i>Triticum aestivum</i>	Wheat	Unassigned	CM 17 protein precursor [Triticum aestivum]	21711
1349	<i>Triticum aestivum</i>	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21713
1350	<i>Triticum aestivum</i>	Wheat	Unassigned	high molecular weight glutenin subunit 1Ax1 [Triticum aestivum]	21743
1351	<i>Triticum aestivum</i>	Wheat	Unassigned	high molecular weight glutenin subunit 10 [Triticum aestivum]	21751
1352	<i>Triticum aestivum</i>	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21755
1353	<i>Triticum aestivum</i>	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21757
1354	<i>Triticum aestivum</i>	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21761
1355	<i>Triticum aestivum</i>	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21765
1356	<i>Triticum aestivum</i>	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21773
1357	<i>Triticum aestivum</i>	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21779

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1358	<i>Triticum aestivum</i>	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21783
1359	<i>Triticum aestivum</i>	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	21793
1360	<i>Triticum aestivum</i>	Wheat	Unassigned	HMW glutenin subunit 1By9 [Triticum aestivum]	22090
1361	<i>Triticum aestivum</i>	Wheat	Unassigned	gamma gliadin precursor	170702
1362	<i>Triticum aestivum</i>	Wheat	Unassigned	gamma-gliadin B precursor	170708
1363	<i>Triticum aestivum</i>	Wheat	Unassigned	alpha-type gliadin precursor protein	170710
1364	<i>Triticum aestivum</i>	Wheat	Unassigned	pre-alpha-/beta-gliadin A-II	170712
1365	<i>Triticum aestivum</i>	Wheat	Unassigned	alpha/beta-gliadin precursor	170718
1366	<i>Triticum aestivum</i>	Wheat	Unassigned	alpha/beta-gliadin precursor [Triticum aestivum]	170720
1367	<i>Triticum aestivum</i>	Wheat	Unassigned	pre-alpha-/beta-gliadin A-I	170722
1368	<i>Triticum aestivum</i>	Wheat	Unassigned	pre-alpha-/beta-gliadin A-IV	170724
1369	<i>Triticum aestivum</i>	Wheat	Unassigned	pre-alpha-/beta-gliadin A-III	170726
1370	<i>Triticum aestivum</i>	Wheat	Unassigned	alpha-type gliadin	170728
1371	<i>Triticum aestivum</i>	Wheat	Unassigned	pre-gamma-gliadin B-I	170730
1372	<i>Triticum aestivum</i>	Wheat	Unassigned	gamma-gliadin	170732
1373	<i>Triticum aestivum</i>	Wheat	Unassigned	gamma gliadin B-III	170734
1374	<i>Triticum aestivum</i>	Wheat	Unassigned	gamma-gliadin	170736
1375	<i>Triticum aestivum</i>	Wheat	Unassigned	gamma-gliadin	170738
1376	<i>Triticum aestivum</i>	Wheat	Unassigned	HMW glutenin subunit Ax2* [Triticum aestivum]	170743
1377	<i>Triticum aestivum</i>	Wheat	Unassigned	alpha-gliadin	473876
1378	<i>Triticum aestivum</i>	Wheat	Unassigned	glutenin [Triticum aestivum]	736319
1379	<i>Triticum aestivum</i>	Wheat	Unassigned	low molecular weight glutenin [Triticum aestivum]	886963
1380	<i>Triticum aestivum</i>	Wheat	Unassigned	low molecular weight glutenin [Triticum aestivum]	886965
1381	<i>Triticum aestivum</i>	Wheat	Unassigned	low molecular weight glutenin [Triticum aestivum]	886967
1382	<i>Triticum aestivum</i>	Wheat	Unassigned	unnamed protein product [Triticum aestivum]	897811
1383	<i>Triticum aestivum</i>	Wheat	Unassigned	profilin [Triticum aestivum]	1008443

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1384	<i>Triticum aestivum</i>	Wheat	Unassigned	profilin [Triticum aestivum]	1008445
1385	<i>Triticum aestivum</i>	Wheat	Unassigned	profilin [Triticum aestivum]	1052817
1386	<i>Triticum aestivum</i>	Wheat	Unassigned	gamma-gliadin precursor [Triticum aestivum]	1063270
1387	<i>Triticum aestivum</i>	Wheat	Unassigned	allergenic peptide=low-molecular-weight glutenin chain [wheat, flour, gluten, Peptide, 30 aa]	1168171
1388	<i>Triticum aestivum</i>	Wheat	Unassigned	alpha-gliadin [Triticum aestivum]	1304264
1389	<i>Triticum aestivum</i>	Wheat	Unassigned	serpin [Triticum aestivum]	1885350
1390	<i>Triticum aestivum</i>	Wheat	Unassigned	Allergen C-C	3913017
1391	<i>Triticum aestivum</i>	Wheat	Unassigned	triosephosphat-isomerase [Triticum aestivum]	11124572
1392	<i>Triticum aestivum</i>	Wheat	Unassigned	putative gamma-gliadin [Triticum aestivum]	62484809
1393	<i>Triticum aestivum</i>	Wheat	Unassigned	putative LMW-glutenin subunit [Triticum aestivum]	62550933
1394	<i>Triticum aestivum</i>	Wheat	Unassigned	serine carboxypeptidase II [Triticum aestivum]	66840994
1395	<i>Triticum aestivum</i>	Wheat	Unassigned	putative leucine-rich repeat protein [Triticum aestivum]	66840996
1396	<i>Triticum aestivum</i>	Wheat	Unassigned	5a2 protein [Triticum aestivum]	66840998
1397	<i>Triticum aestivum</i>	Wheat	Unassigned	omega-5 gliadin [Triticum aestivum]	73912496
1398	<i>Triticum aestivum</i>	Wheat	Unassigned	LMM glutenin 1	75219081
1399	<i>Triticum aestivum</i>	Wheat	Unassigned	LMM glutenin 3	75317968
1400	<i>Triticum aestivum</i>	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
1401	<i>Triticum aestivum</i>	Wheat	Unassigned	serine proteinase inhibitor-like allergen [Triticum aestivum]	154101366

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1402	<i>Triticum aestivum</i>	Wheat	Unassigned	major allergen CM16 [Triticum aestivum]	195957140
1403	<i>Triticum aestivum</i>	Wheat	Unassigned	D-type LMW glutenin subunit [Triticum aestivum]	208605344
1404	<i>Triticum aestivum</i>	Wheat	Unassigned	D-type LMW glutenin subunit [Triticum aestivum]	208605346
1405	<i>Triticum aestivum</i>	Wheat	Unassigned	D-type LMW glutenin subunit [Triticum aestivum]	208605348
1406	<i>Triticum turgidum</i>	Wheat	Unassigned	tetrameric alpha-amylase inhibitor 16 kDa subunit, CM16* [Triticum turgidum L.=pasta wheat, cv. Senatore Capelli, Peptide Partial, 18 aa]	244610
1407	<i>Triticum turgidum</i> subsp. <i>durum</i>	Wheat	Unassigned	precursor (AA -24 to 119) [Triticum turgidum subsp. durum]	21916
1408	<i>Triticum turgidum</i> subsp. <i>durum</i>	Wheat	Unassigned	CM2 protein [Triticum turgidum subsp. durum]	21920
1409	<i>Triticum turgidum</i> subsp. <i>durum</i>	Wheat	Unassigned	unnamed protein product [Triticum turgidum subsp. durum]	21926
1410	<i>Triticum turgidum</i> subsp. <i>durum</i>	Wheat	Unassigned	LMW glutenin [Triticum turgidum subsp. durum]	21930
1411	<i>Triticum turgidum</i> subsp. <i>durum</i>	Wheat	Unassigned	alpha-amylase inhibitor, tetrameric, chain CM3 precursor - durum wheat	100834
1412	<i>Triticum urartu</i>	Wheat	Unassigned	gliadin	170740
1413	<i>Tyrophagus putrescentiae</i>	Dust mite	Unassigned	Mite group 2 allergen Tyr p 2 precursor	3182907
1414	<i>Tyrophagus putrescentiae</i>	Dust mite	Unassigned	tropomyosin [Tyrophagus putrescentiae]	48249227
1415	<i>Tyrophagus putrescentiae</i>	Dust mite	Tyr p 13	fatty acid-binding protein [Tyrophagus putrescentiae]	51860756
1416	<i>Tyrophagus putrescentiae</i>	Dust mite	Unassigned	mite allergen Tyr p 13 [Tyrophagus putrescentiae]	121296500
1417	<i>Tyrophagus putrescentiae</i>	Dust mite	Unassigned	tropomyosin [Tyrophagus putrescentiae]	148615631
1418	<i>Tyrophagus putrescentiae</i>	Dust mite	Unassigned	tropomyosin [Tyrophagus putrescentiae]	156938915
1419	<i>Tyrophagus putrescentiae</i>	Dust mite	Unassigned	allergen Tyr p 13 [Tyrophagus putrescentiae]	156938917

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1420	<i>Vespa crabro</i>	European hornet	Vesp c 5	Venom allergen 5.01 (Antigen 5-1) (Ag5-1) (Allergen Vesp c 5.01) (Vesp c V.01)	549184
1421	<i>Vespa crabro</i>	European hornet	Vesp c 5	Venom allergen 5.02 (Antigen 5-2) (Ag5-2) (Allergen Vesp c 5.02) (Vesp c V.02)	549185
1422	<i>Vespa mandarinia</i>	Wasp	Vesp m 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Vesp m 5)	6136165
1423	<i>Vespula flavopilosa</i>	Wasp	Ves f 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Ves f 5) (Ves f V)	549189
1424	<i>Vespula germanica</i>	Wasp	Ves g 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Ves g 5) (Ves g V)	549190
1425	<i>Vespula germanica</i>	Wasp	Unassigned	Ves g 5 allergen precursor [Vespula germanica]	74035841
1426	<i>Vespula germanica</i>	Wasp	Unassigned	Ves g 1 allergen precursor [Vespula germanica]	74035843
1427	<i>Vespula germanica</i>	Wasp	Unassigned	hyaluronidase [Vespula germanica]	116174180
1428	<i>Vespula germanica</i>	Wasp	Unassigned	hyaluronidase homologue [Vespula germanica]	116174182
1429	<i>Vespula maculifrons</i>	Wasp	Ves m 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Ves m 5) (Ves m V)	549191
1430	<i>Vespula maculifrons</i>	Wasp	Ves m 1	Phospholipase A1 (Allergen Ves m 1) (Ves m I)	1709545
1431	<i>Vespula maculifrons</i>	Wasp	Unassigned	venom allergen 5 [Vespula maculifrons]	85681830
1432	<i>Vespula pensylvanica</i>	Wasp	Ves p 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Ves p 5) (Ves p V)	549192
1433	<i>Vespula squamosa</i>	Wasp	Ves s 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Ves s 5) (Ves s V)	549193
1434	<i>Vespula vidua</i>	Wasp	Ves vi 5	Venom allergen 5 (Antigen 5) (Ag5) (Allergen Ves vi 5) (Ves vi V)	549194
1435	<i>Vespula vulgaris</i>	Wasp	Ves v 5	allergen 5	162551
1436	<i>Vespula vulgaris</i>	Wasp	Ves v 1	allergen and phospholipase A1	897647

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1437	<i>Vespula vulgaris</i>	Wasp	Ves v 2	Hyaluronoglucosaminidase (Hyaluronidase) (Allergen Ves v 2) (Ves v II)	1346323
1438	<i>Vespula vulgaris</i>	Wasp	Ves v 5	allergen 5; antigen 5 [Vespula vulgaris]	4826574
1439	<i>Vespula vulgaris</i>	Wasp	Ves v 5	Chain A, Ves V 5, An Allergen From Vespula Vulgaris Venom	11514279
1440	<i>Vespula vulgaris</i>	Wasp	Unassigned	hyaluronidase b [Vespula vulgaris]	62147665
1441	<i>Vespula vulgaris</i>	Wasp	Unassigned	Chain A, Crystal Structure Of The Recombinant Allergen Ves V 2	109157163
1442	<i>Vigna radiata</i>	Mung bean	Unassigned	pathogenesis-related protein 10 [Vigna radiata]	60418924
1443	<i>Vitis</i> sp.	Grape	Unassigned	Nonspecific lipid-transfer protein P2 (LTP P2)	462717
1444	<i>Vitis</i> sp.	Grape	Vit v 1	Nonspecific lipid-transfer protein P4 (LTP P4)	462719
1445	<i>Vitis</i> sp.	Grape	Unassigned	Nonspecific lipid-transfer protein P3 (LTP P3)	145559502
1446	<i>Xiphias gladius</i>	Swordfish	Unassigned	beta-parvalbumin [Xiphias gladius]	222352960
1447	<i>Zea mays</i>	Corn	Zea m 14	Nonspecific lipid-transfer protein precursor (LTP) (Phospholipid transfer protein) (PLTP) (Allergen Zea m 14)	128388
1448	<i>Zea mays</i>	Corn	Unassigned	Zm13	1588669
1449	<i>Zea mays</i>	Corn	Unassigned	profilin [Zea mays]	2642324
1450	<i>Zea mays</i>	Corn	Unassigned	beta-expansin 1 [Zea mays]	14193761
1451	<i>Zea mays</i>	Corn	Unassigned	beta-expansin 9 protein [Zea mays]	28630919
1452	<i>Zea mays</i>	Corn	Unassigned	beta-expansin 1 protein [Zea mays]	28630923
1453	<i>Zea mays</i>	Corn	Unassigned	thioredoxin h1 protein [Zea mays]	66841002
1454	<i>Zea mays</i>	Corn	Unassigned	Zea m 1 allergen [Zea mays]	89892721
1455	<i>Zea mays</i>	Corn	Unassigned	Zea m 1 allergen [Zea mays]	89892723
1456	<i>Zea mays</i>	Corn	Unassigned	Zea m 13 allergen [Zea mays]	89892725
1457	<i>Zea mays</i>	Corn	Unassigned	Zea m 13 allergen [Zea mays]	89892727
1458	<i>Zea mays</i>	Corn	Unassigned	Zea m 13 allergen [Zea mays]	89892729

**Protein sequences included in the FARRP AllergenOnline database, version 10.0 (Continued)**

Entry	Organism	Common name	Allergen name	Description	GenInfo identifier
1459	<i>Zea mays</i>	Corn	Unassigned	EXPB10 [ <i>Zea mays</i> ]	105969543
1460	<i>Zea mays</i>	Corn	Unassigned	EXPB10 [ <i>Zea mays</i> ]	105969545
1461	<i>Zea mays</i>	Corn	Unassigned	pollen profilin variant 1 [ <i>Zea mays</i> ]	110644952
1462	<i>Zea mays</i>	Corn	Unassigned	pollen profilin variant 2 [ <i>Zea mays</i> ]	110644954
1463	<i>Zea mays</i>	Corn	Unassigned	pollen profilin variant 3 [ <i>Zea mays</i> ]	110644956
1464	<i>Zea mays</i>	Corn	Unassigned	pollen profilin variant 4 [ <i>Zea mays</i> ]	110644958
1465	<i>Zea mays</i>	Corn	Unassigned	pollen profilin variant 5 [ <i>Zea mays</i> ]	110644960
1466	<i>Zea mays</i>	Corn	Unassigned	pollen profilin variant 6 [ <i>Zea mays</i> ]	110644962
1467	<i>Zea mays</i>	Corn	Unassigned	pollen profilin variant 7 [ <i>Zea mays</i> ]	110644964
1468	<i>Zea mays</i>	Corn	Unassigned	Chain X, Crystal Structure Of Expb1 ( <i>Zea M 1</i> ), A Beta-Expansin And Group-1 Pollen Allergen From Maize	114794319
1469	<i>Zea mays</i>	Corn	Unassigned	Expansin-B10 precursor (ZmEXPB10) (Beta-expansin-10) (Pollen allergen <i>Zea m 1c</i> )	115502167
1470	<i>Zea mays</i>	Corn	Unassigned	Expansin-B11 precursor (ZmEXPB11) (Beta-expansin-11) (Pollen allergen <i>Zea m 1a</i> ) (Pollen allergen <i>Zea m 1b</i> )	115502168
1471	<i>Ziziphus mauritiana</i>	Cottony jujube	Unassigned	allergen <i>Ziz m 1</i> [ <i>Ziziphus mauritiana</i> ]	61225281