

Table S1. List of molecules spotted on the allergen chip.

Allergen	Source	Rec. or natural	Name/Function of the protein/Allergen family
Respiratory allergens			
Aln g 1	<i>Alder</i>	R	PR-10
Alt a 1	<i>Alternaria</i>	R	Acidic glycoprotein
Alt a 6	<i>Alternaria</i>	R	Enolase
Amb a 1	<i>Ragweed</i>	N	Pectate lyase
Art v 1	<i>Mugwort</i>	N	Defensin
Art v 3	<i>Mugwort</i>	N	LTP
Asp f 1	<i>Aspergillus</i>	R	Mitogillin family
Asp f 3	<i>Aspergillus</i>	R	Peroxisomal protein
Asp f 6	<i>Aspergillus</i>	R	Mn superoxide dismutase
Bet v 1	<i>Birch</i>	R	PR-10
Bet v 2	<i>Birch</i>	R	Profilin
Bet v 4	<i>Birch</i>	R	Polcalcin
Bla g 1	<i>Cockroach</i>	R	Cockroach group 1
Bla g 2	<i>Cockroach</i>	R	Aspartic protease
Bla g 5	<i>Cockroach</i>	R	Glutathione S-transferase
Bla g 7	<i>Cockroach</i>	N	Tropomyosin
Blo t 5	<i>Blomia tropicalis</i>	R	Group 5/21 mite allergens
Can f 1	<i>Dog</i>	R	Lipocalin
Can f 2	<i>Dog</i>	R	Lipocalin
Can f 3	<i>Dog</i>	N	Serum Albumin
Can f 4	<i>Dog</i>	R	Lipocalin (Odorant-binding protein)
Can f 5	<i>Dog</i>	R	Arginine esterase (Trypsin-like serine protease)
Can f 6	<i>Dog</i>	R	Lipocalin
Che a 1	<i>Goosefoot</i>	R	Trypsin Inhibitor
Cyn d 1	<i>Bermuda grass</i>	N	Grass group 1
Cry j 1	<i>Japanese cedar</i>	N	Pectate lyase
Cup a 1	<i>Cypress</i>	N	Pectate lyase
Der f 1	<i>House dust mite</i>	N	Cysteine protease
Der f 2	<i>House dust mite</i>	R	NPC2 family
Der p 1	<i>House dust mite</i>	N	Cysteine protease
Der p 2	<i>House dust mite</i>	R	NPC2 family
Der p 4	<i>House dust mite</i>	R	Alpha amylase
Der p 5	<i>House dust mite</i>	R	Group 5 mite allergens
Der p 7	<i>House dust mite</i>	R	Group 7 mite allergens

Der p 10	<i>House dust mite</i>	R	Tropomyosin
Der p 11	<i>House dust mite</i>	R	Paramyosin
Der p 14	<i>House dust mite</i>	R	Apolipoporphin
Der p 15	<i>House dust mite</i>	R	Chitinase-like protein
Der p 18	<i>House dust mite</i>	R	Chitin-binding protein
Der p 21	<i>House dust mite</i>	R	Group 21 mite allergens
Der p 23	<i>House dust mite</i>	R	Peritrophin-like protein
Der p 37	<i>House dust mite</i>	R	Protein similar to chitin-binding protein
Equ c 1	<i>Horse</i>	R	Lipocalin
Equ c 3	<i>Horse</i>	N	Serum Albumin
Fag e 2	<i>Buckwheat</i>	N	Storage protein, 2S albumin
Fel d 1	<i>Cat</i>	R	Uteroglobin
Fel d 2	<i>Cat</i>	N	Serum Albumin
Fel d 4	<i>Cat</i>	R	Lipocalin
Lep d 2	<i>Storage mite</i>	R	NPC2 family
Mal d 1	<i>Apple</i>	R	PR-10
Mer a 1	<i>Annual mercury</i>	R	Profilin
Mus m 1	<i>Mouse</i>	N	Lipocalin
MUXF3	<i>CCD</i>	N	CCD
Phl p 1	<i>Timothy</i>	R	Grass group 1
Phl p 2	<i>Timothy</i>	R	Grass group 2
Phl p 4	<i>Timothy</i>	N	Berberine bridge enzyme
Phl p 5	<i>Timothy</i>	R	Grass group 5
Phl p 6	<i>Timothy</i>	R	Grass group 6
Phl p 7	<i>Timothy</i>	R	Polcalcin
Phl p 11	<i>Timothy</i>	R	Trypsin inhibitor
Phl p 12	<i>Timothy</i>	R	Profilin
Pla a 1	<i>Plane</i>	R	Invertase Inhibitor
Pla a 2	<i>Plane</i>	N	Polygalacturonase
Pla a 3	<i>Plane</i>	R	LTP
Pla l 1	<i>Plantain</i>	R	Pectate lyase
<i>Food allergens</i>			
Act d 1	<i>Kiwi</i>	N	Cysteine protease
Act d 2	<i>Kiwi</i>	N	Thaumatococcus-like protein
Act d 5	<i>Kiwi</i>	N	Kiwelin
Act d 8	<i>Kiwi</i>	R	PR-10
Ana o 1	<i>Cashew nut</i>	N	Vicilin-like protein
Ana o 2	<i>Cashew nut</i>	R	Storage protein, 11S globulin
nAna o 2	<i>Cashew nut</i>	N	Storage protein, 11S globulin

Ana o 3	<i>Cashew nut</i>	R	Storage protein, 2S albumin
Api g 1	<i>Celery</i>	R	PR-10
Ara h 1	<i>Peanut</i>	R	Storage protein, 7S globulin
Ara h 2	<i>Peanut</i>	R	Storage protein, 2S albumin
Ara h 3	<i>Peanut</i>	R	Storage protein, 11S albumin
Ara h 6	<i>Peanut</i>	N	Storage protein, 2S albumin
Ara h 8	<i>Peanut</i>	R	PR-10
Ara h 9	<i>Peanut</i>	R	LTP
Ber e 1	<i>Brazil nut</i>	R	Storage protein, 2S albumin
Bos d 4	<i>Cow's Milk</i>	N	Alpha-lactalbumin
Bos d 5	<i>Cow's Milk</i>	N	Beta-lactoglobulin
Bos d Lactoferrin	<i>Cow's Milk</i>	N	Transferrin
Bos d 8	<i>Cow's Milk</i>	N	Casein
aS1-casein	<i>Cow's Milk</i>	N	Casein
aS2-casein	<i>Cow's Milk</i>	N	Casein
b-casein	<i>Cow's Milk</i>	N	Casein
K-casein	<i>Cow's Milk</i>	N	Casein
Transferrin	<i>Cow's Milk</i>	N	Transferrin
Bovine serum albumin	<i>Cow's Milk</i>	N	Serum albumin
Bos d 6	<i>Cow</i>	N	Serum albumin
Cor a 1.0401	<i>Hazelnut</i>	R	PR-10
Cor a 8	<i>Hazelnut</i>	R	LTP
Cor a 9	<i>Hazelnut</i>	N	Storage protein, 11S globulin
Gad c 1	<i>Codfish</i>	R	Parvalbumin
Gal d 1	<i>Egg white</i>	N	Ovomucoid
Gal d 2	<i>Egg white</i>	N	Ovalbumin
Gal d 3	<i>Egg white</i>	N	Ovotransferrin
Gal d 5	<i>Egg yolk/chicken</i>	N	Livetin (serum albumin)
Gly m 4	<i>Soy</i>	R	PR-10
Gly m 5	<i>Soy</i>	N	Storage protein, Beta-conglycinin
Gly m 6	<i>Soy</i>	N	Storage protein, Glycinin
Jug r 1	<i>Walnut</i>	N	Storage protein, 2S albumin
Jug r 2	<i>Walnut</i>	N	Cupin superfamily, 7S Vicilin-like globulin
Jug r 3	<i>Walnut</i>	N	LTP
Ole e 1	<i>Olive</i>	N	Trypsin inhibitor
Ole e 7	<i>Olive</i>	N	LTP
Ole e 9	<i>Olive</i>	R	Glucanase
rOle e 5	<i>Olive</i>	R	Superoxide dismutase

rOle e 6	<i>Olive</i>	R	Oleaceae group 6
rOle e 8	<i>Olive</i>	R	Calcium-binding protein (Polcalcin)
rOle e 10	<i>Olive</i>	R	Glycosyl hydrolase
Par j 2	<i>Wall pellitory</i>	R	LTP
Pen m 1	<i>Shrimp</i>	N	Tropomyosin
Pen m 2	<i>Shrimp</i>	N	Arginine Kinase
Pen m 4	<i>Shrimp</i>	N	Calcium-binding protein
Pis v 3	<i>Pistachio</i>	R	7S Vicilin-like Globulin
Pru p 1	<i>Peach</i>	R	PR-10
Pru p 3	<i>Peach</i>	R	LTP
Pru du 3	<i>Almond</i>	R	LTP
Pru du 4	<i>Almond</i>	R	Profilin
Pru du 6	<i>Almond</i>	N	Storage protein, 11S globulin
Pru du 6.01	<i>Almond</i>	R	Storage protein, 11S globulin
Pru du 6.02	<i>Almond</i>	R	Storage protein, 11S globulin
Sal k 1	<i>Saltwort</i>	N	Pectin methylesterase
Ses i 1	<i>Sesame</i>	N	Storage protein, 2S albumin
Tri a 14	<i>Wheat</i>	R	LTP
Tri a 19.0101	<i>Wheat</i>	N	Omega 5 gliadin
Tri a aA_TI	<i>Wheat</i>	N	Alpha-Amylase / Trypsin Inhibitor
Tri a 36 191	<i>Wheat</i>	R	Fragment of LMW Glutenin
Tri a 36	<i>Wheat</i>	R	Glutenin Subunit, LMW Glutenin
GG1	<i>Wheat</i>	R	Gamma gliadin 1
Peptide 4	<i>Wheat</i>	R (peptide)	Peptide from gamma gliadin 1
Clone 79	<i>Wheat</i>	R	Gamma gliadin
Clone 85	<i>Wheat</i>	R	Gamma gliadin
Clone 110	<i>Wheat</i>	R	Gamma gliadin (Fragment)
Avenin	<i>Wheat</i>	R	Avenin
m43	<i>Wheat</i>	R	Fragment of HMW Glutenin Bx7
m82	<i>Wheat</i>	R	Fragment of HMW Glutenin Bx7
#10/Serine proteinase inhibitor	<i>Wheat</i>	R	Serine proteinase inhibitor
#37/Thioredoxin	<i>Wheat</i>	R	Thionin
#38/Glutathione transferase	<i>Wheat</i>	R	Glutathione transferase
#112/1 Cys-peroxiredoxin	<i>Wheat</i>	R	Peroxiredoxin (1-Cys-peroxiredoxin)
#123/Profilin	<i>Wheat</i>	R	Profilin
#126/Dehydrin	<i>Wheat</i>	R	Dehydrin
Alpha	<i>Wheat</i>	R	Alpha-purothionin

purothionin			
LTP	<i>Wheat</i>	R	LTP
<i>Other allergens</i>			
Ani s 1	<i>Anisakis</i>	R	Serine protease inhibitor
Ani s 3	<i>Anisakis</i>	R	Tropomyosin
Api m 1	<i>Bee venom</i>	R	Phospholipase A2
Api m 2	<i>Bee venom</i>	R	Hyaluronidase
Api m 4	<i>Bee venom</i>	R	Melittin
Hev b 1	<i>Latex</i>	R	Rubber elongation factor
Hev b 3	<i>Latex</i>	R	Small rubber particle protein
Hev b 5	<i>Latex</i>	R	Acidic protein
Hev b 6.01	<i>Latex</i>	R	Hevein
Hev b 8	<i>Latex</i>	R	Profilin
Ves v 1	<i>Wasp</i>	R	Phospholipase
Ves v 5	<i>Wasp</i>	R	Antigen 5
htTG	<i>Human</i>	R	Human tissue transglutamine