

PATIENT CODE



PATIENT NAME



SAMPLE CODE

Test 4

ANALYSIS DATE

16/05/2026

QR-CODE

03EBR148

ALLERGENS

300

TEST METHOD

ALEX³

DOCTOR INFORMATION



Total IgE result: 259 kU/L

Reference range total IgE
Adults < 100 kU/L

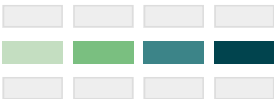
LAB REPORT

Summary of detectable sensitisations



POLLEN

Grass Pollen
Tree Pollen
Weed Pollen



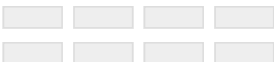
MITES

House Dust Mites & Storage Mites



DANDER & EPITHELIA

Farm Animals
Pets



MICROORGANISMS

Fungal Spores & Yeast



INSECTS

Cockroach



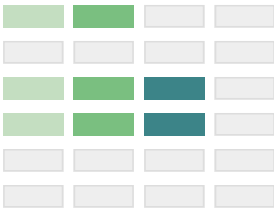
VENOMS

Ant, Bee, Wasp, Hornet



PLANT-BASED FOOD

Fruits
Grains
Legumes
Nuts & Seeds
Spices
Vegetables



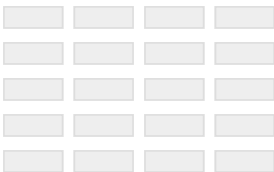
ANIMAL-BASED FOOD

Egg
Fish & Seafood
Meat
Milk

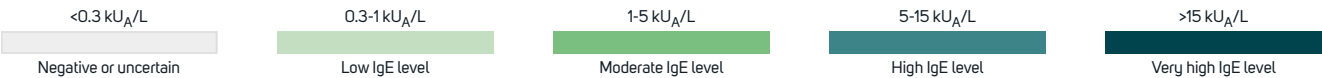


OTHERS

CCD
Ficus
Latex
Parasite
Red meat



Measured IgE concentration ranges per allergen group





Summary of all positive results. Please note that no components were added to the respective extracts (i.e., the extracts were not spiked).

Pollen

Tree Pollen

Name	E/M	Allergen	Allergen family	kU _A /L
Olive	●	Ole e 1	Ole e 1 Family	31.62
Ash	●	Fra e 1	Ole e 1 Family	30.41

Mites

House Dust Mites & Storage Mites

Name	E/M	Allergen	Allergen family	kU _A /L
European house dust mite	●	Der p 2	NPC2 Family	> 50.00
American house dust mite	●	Der f 2	NPC2 Family	> 50.00
	●	Der f 1	Cysteine Protease	36.76
European house dust mite	●	Der p 1	Cysteine Protease	25.27

Plant-Based Food

Fruits

Name	E/M	Allergen	Allergen family	kU _A /L
Kiwi	●	Act d 1	Cysteine Protease	1.36

Legumes

Name	E/M	Allergen	Allergen family	kU _A /L
Peanut	●	Ara h 6	2S Albumin	10.42
	●	Ara h 2	2S Albumin	9.93
	●	Ara h 1	7/8S Globulin	5.96
	●	Ara h 3	11S Globulin	1.45
Chickpea	■	Cic a		0.33

Nuts & Seeds

Name	E/M	Allergen	Allergen family	kU _A /L
Cashew	●	Ana o 3	2S Albumin	6.15
Hazelnut	●	Cor a 14	2S Albumin	2.24
Sesame	●	Ses i 1	2S Albumin	1.76
Hazelnut	●	Cor a 11	7/8S Globulin	1.69
Walnut	●	Jug r 1	2S Albumin	0.79

Name	E/M	Allergen	Allergen family	kU _A /L				
Pistachio		Pis v 1	2S Albumin					0.64
Sesame		Ses i						0.47
Hazelnut		Cor a 9	11S Globulin					0.35
Pumpkin seed		Cuc p						0.30

Animal-Based Food

Meat

Name	E/M	Allergen	Allergen family	kU _A /L				
Rabbit		Ory c_meat						0.39



Summary of all results. Please note that no components were added to the respective extracts (i.e., the extracts were not spiked).

Pollen

Grass Pollen

Name	E/M	Allergen	Allergen family	kU _A /L
Bermuda grass	⊙	Cyn d 1	β-Expansin	< 0.10
Bahia grass	⋮	Pas n		< 0.10
Timothy grass	⊙	Phl p 1	β-Expansin	< 0.10
	⊙	Phl p 2	Expansin	< 0.10
	⊙	Phl p 5.0101	Grass Group 5/6	< 0.10
	⊙	Phl p 6	Grass Group 5/6	< 0.10
	⊙	Phl p 7	Polcalcin	< 0.10
	⊙	Phl p 12	Profilin	< 0.10
Common reed	⋮	Phr c		< 0.10
Rye pollen	⋮	Sec c_pollen		< 0.10
Maize pollen	⊙	Zea m 1	β-Expansin	< 0.10

Tree Pollen

Name	E/M	Allergen	Allergen family	kU _A /L
Olive	⊙	Ole e 1	Ole e 1 Family	31.62
Ash	⊙	Fra e 1	Ole e 1 Family	30.41
Olive	⊙	Ole e 7	nsLTP	0.17
Arizona cypress	⊙	Cup a 1	Pectate Lyase	0.16
Walnut	⋮	Jug r_pollen		0.15
Acacia	⋮	Aca m		< 0.10
Tree of heaven	⋮	Ail a		< 0.10
Alder	⊙	Aln g 1	PR-10	< 0.10
	⊙	Aln g 4	Polcalcin	< 0.10
Silver birch	⊙	Bet v 1	PR-10	< 0.10
	⊙	Bet v 6	Isoflavon Reductase	< 0.10
	⊙	Bet v 7	Cyclophilin	< 0.10
Paper mulberry	⋮	Bro pa		< 0.10
Sugi	⊙	Cry j 1	Pectate Lyase	< 0.10
Cypress	⋮	Cup s		< 0.10
Mountain cedar	⋮	Jun a		< 0.10
Olive	⊙	Ole e 9	β-1,3-Glucanase	< 0.10
London plane tree	⊙	Pla a 1	Plant Invertase	< 0.10
	⊙	Pla a 2	Polygalacturonase	< 0.10
	⊙	Pla a 3	nsLTP	< 0.10
Oak	⊙	Que a 1	PR-10	< 0.10



Weed Pollen

Name	E/M	Allergen	Allergen family	kU _A /L
Ragweed	●	Amb a 4	Plant Defensin	0.16
	●	Amb a 1	Pectate Lyase	0.14
Pigweed	■	Ama r		< 0.10
Ragweed	■	Amb a		< 0.10
Mugwort	■	Art v		< 0.10
	●	Art v 1	Plant Defensin	< 0.10
	●	Art v 3	nsLTP	< 0.10
Hemp	■	Can s		< 0.10
	●	Can s 3	nsLTP	< 0.10
Lamb's quarter	■	Che a		< 0.10
	●	Che a 1	Ole e 1 Family	< 0.10
Wall pellitory	■	Par j		< 0.10
	●	Par j 2	nsLTP	< 0.10
Ribwort	●	Pla l 1	Ole e 1 Family	< 0.10
Russian thistle	■	Sal k		< 0.10
	●	Sal k 1	Pectin Methylesterase	< 0.10
	●	Sal k 5	Ole e 1 Family	< 0.10

Mites

House Dust Mites & Storage Mites

Name	E/M	Allergen	Allergen family	kU _A /L
European house dust mite	●	Der p 2	NPC2 Family	> 50.00
American house dust mite	●	Der f 2	NPC2 Family	> 50.00
	●	Der f 1	Cysteine Protease	36.76
European house dust mite	●	Der p 1	Cysteine Protease	25.27
Lepidoglyphus destructor	●	Lep d 2	NPC2 Family	0.12
Acarus siro	■	Aca s		< 0.10
Blomia tropicalis	●	Blo t 2	NPC2 Family	< 0.10
	●	Blo t 5	Mite Group 5/21	< 0.10
	●	Blo t 10	Tropomyosin	< 0.10
	●	Blo t 21	Mite Group 5/21	< 0.10
American house dust mite	●	Der f 15	Chitinase	< 0.10
	●	Der f 18	Chitinase-like Protein	< 0.10
European house dust mite	●	Der p 5	Mite Group 5/21	< 0.10
	●	Der p 7	Mite Group 7	< 0.10
	●	Der p 10	Tropomyosin	< 0.10
	●	Der p 20	Arginine Kinase	< 0.10
	●	Der p 21	Mite Group 5/21	< 0.10
	●	Der p 23	Peritrophin-like Protein Domain	< 0.10



Name	E/M	Allergen	Allergen family	kU _A /L
Glycyphagus domesticus	⊙	Gly d 2	NPC2 Family	< 0.10
Tyrophagus putrescentiae	⋮	Tyr p		< 0.10
	⊙	Tyr p 2	NPC2 Family	< 0.10
	⊙	Tyr p 10	Tropomyosin	< 0.10

Dander & Epithelia

Farm Animals

Name	E/M	Allergen	Allergen family	kU _A /L
Goat	⋮	Cap h_epithelia		0.16
Cattle	⊙	Bos d 2	Lipocalin	< 0.10
Horse	⊙	Equ c 1	Lipocalin	< 0.10
	⊙	Equ c 3	Serum Albumin	< 0.10
	⊙	Equ c 4	Latherin	< 0.10
Pig	⋮	Sus d_epithelia		< 0.10

Pets

Name	E/M	Allergen	Allergen family	kU _A /L
Cat	⊙	Fel d 4	Lipocalin	0.11
Dog	⊙	Can f Fel d 1 like	Uteroglobin	< 0.10
Dog urine (incl. Can f 5)	⋮	Can f_male urine		< 0.10
Dog	⊙	Can f 1	Lipocalin	< 0.10
	⊙	Can f 2	Lipocalin	< 0.10
	⊙	Can f 3	Serum Albumin	< 0.10
	⊙	Can f 4	Lipocalin	< 0.10
	⊙	Can f 6	Lipocalin	< 0.10
Guinea pig	⊙	Cav p 1	Lipocalin	< 0.10
Cat	⊙	Fel d 1	Uteroglobin	< 0.10
	⊙	Fel d 2	Serum Albumin	< 0.10
	⊙	Fel d 7	Lipocalin	< 0.10
Golden hamster	⊙	Mes a 1	Lipocalin	< 0.10
Mouse	⊙	Mus m 1	Lipocalin	< 0.10
Rabbit	⊙	Ory c 1	Lipocalin	< 0.10
	⊙	Ory c 2	Lipocalin	< 0.10
	⊙	Ory c 3	Uteroglobin	< 0.10
Djungarian hamster	⊙	Phod s 1	Lipocalin	< 0.10
Rat	⊙	Rat n 1	Lipocalin	< 0.10

Microorganisms

Fungal Spores & Yeast



Name	E/M	Allergen	Allergen family	kU _A /L
Alternaria alternata		Alt a 1	Alt a 1 Family	0.11
		Alt a 6	Enolase	< 0.10
Aspergillus fumigatus		Asp f 1	Mitogillin Family	< 0.10
		Asp f 3	Peroxisomal Protein	< 0.10
		Asp f 4	Unknown	< 0.10
		Asp f 6	Mn Superoxide Dismutase	< 0.10
		Asp f 8	Ribosomal Protein P2	< 0.10
		Cla h		< 0.10
Cladosporium herbarum		Cla h 8	Mannitol Dehydrogenase	< 0.10
		Mala s 5	Unknown	< 0.10
Malassezia sympodialis		Mala s 6	Cyclophilin	< 0.10
		Mala s 11	Mn Superoxide Dismutase	< 0.10
		Mala s 13	Thioredoxin	< 0.10
Penicillium chrysogenum		Pen ch		< 0.10

Insects

Cockroach

Name	E/M	Allergen	Allergen family	kU _A /L
German cockroach		Bla g 1	Nitrile Specifier	< 0.10
		Bla g 2	Aspartic Protease	< 0.10
		Bla g 4	Lipocalin	< 0.10
		Bla g 5	Glutathione S-Transferase	< 0.10
		Bla g 9	Arginine Kinase	< 0.10
American cockroach		Per a		< 0.10
		Per a 6	Troponin C	< 0.10
		Per a 7	Tropomyosin	< 0.10

Venoms

Ant, Bee, Wasp, Hornet

Name	E/M	Allergen	Allergen family	kU _A /L
Honey bee		Api m		< 0.10
		Api m 1	Phospholipase A2	< 0.10
		Api m 2	Hyaluronidase	< 0.10
		Api m 10	Icarapin Variant 2	< 0.10
Bald-faced Hornet		Dol m 2	Hyaluronidase	< 0.10
		Dol m 5	Antigen 5	< 0.10
Paper wasp		Pol d		< 0.10
		Pol d 5	Antigen 5	< 0.10
Fire ant		Sol spp		< 0.10
Common wasp		Ves v 1	Phospholipase A1	< 0.10



Name	E/M	Allergen	Allergen family	kU _A /L	
		Ves v 5	Antigen 5		< 0.10

Plant-Based Food

Fruits

Name	E/M	Allergen	Allergen family	kU _A /L	
Kiwi		Act d 1	Cysteine Protease		1.36
Strawberry		Fra a 3	nsLTP		0.22
Kiwi		Act d 2	Thaumatococcus-like Protein		< 0.10
		Act d 5	Kiwelin		< 0.10
		Act d 10	nsLTP		< 0.10
Papaya		Car p			< 0.10
Coconut		Coc n 1	7/8S Globulin		< 0.10
Muskmelon		Cuc m 2	Profilin		< 0.10
Fig		Fic c			< 0.10
Apple		Mal d 1	PR-10		< 0.10
		Mal d 3	nsLTP		< 0.10
Mango		Man i 1	Class 4 Chitinase		< 0.10
Banana		Mus a 2	Class 1 Chitinase		< 0.10
		Mus a 5	β-1,3-Glucanase		< 0.10
Avocado		Pers a			< 0.10
		Pers a 1	Class 1 Chitinase		< 0.10
Cherry		Pru av 3	nsLTP		< 0.10
Peach		Pru p 3	nsLTP		< 0.10
		Pru p 7	Gibberellin-regulated Protein		< 0.10
Pear		Pyr c			< 0.10
Grape		Vit v 1	nsLTP		< 0.10

Grains

Name	E/M	Allergen	Allergen family	kU _A /L	
Cultivated rye		Sec c_fLOUR			0.19
Buckwheat		Fag e			0.15
		Fag e 2	2S Albumin		0.14
Lupine seed		Lup a			0.10
Oat		Ave s			< 0.10
Quinoa		Che q			< 0.10
Barley		Hor v			< 0.10
Millet		Pan m			< 0.10
Wheat		Tri a aA-TI	α-Amylase Trypsin-Inhibitor		< 0.10
		Tri a 14	nsLTP		< 0.10
		Tri a 19	Ω-5-Gliadin		< 0.10



Name	E/M	Allergen	Allergen family	kU _A /L
	●	Tri a 36	Low Molecular Weight Glutenin	< 0.10
	●	Tri a 37	α-Purothionin	< 0.10
Spelt	■	Tri s		< 0.10
Maize	■	Zea m		< 0.10
	●	Zea m 14	nsLTP	< 0.10

Legumes

Name	E/M	Allergen	Allergen family	kU _A /L
Peanut	●	Ara h 6	2S Albumin	10.42
	●	Ara h 2	2S Albumin	9.93
	●	Ara h 1	7/8S Globulin	5.96
	●	Ara h 3	11S Globulin	1.45
Chickpea	■	Cic a		0.33
Soy	●	Gly m 5	7/8S Globulin	0.11
Peanut	●	Ara h 8	PR-10	< 0.10
	●	Ara h 9	nsLTP	< 0.10
	●	Ara h 15	Oleasin	< 0.10
	●	Ara h 18	Cyclophilin	< 0.10
Soy	●	Gly m 4	PR-10	< 0.10
	●	Gly m 6	11S Globulin	< 0.10
	●	Gly m 8	2S Albumin	< 0.10
Lentil	●	Len c 1	7/8S Globulin	< 0.10
	●	Len c 3	nsLTP	< 0.10
Pea	●	Pis s 1	7/8S Globulin	< 0.10
	●	Pis s 2	7/8S Globulin	< 0.10
	●	Pis s 3	nsLTP	< 0.10

Nuts & Seeds

Name	E/M	Allergen	Allergen family	kU _A /L
Cashew	●	Ana o 3	2S Albumin	6.15
Hazelnut	●	Cor a 14	2S Albumin	2.24
Sesame	●	Ses i 1	2S Albumin	1.76
Hazelnut	●	Cor a 11	7/8S Globulin	1.69
Walnut	●	Jug r 1	2S Albumin	0.79
Pistachio	●	Pis v 1	2S Albumin	0.64
Sesame	■	Ses i		0.47
Hazelnut	●	Cor a 9	11S Globulin	0.35
Pumpkin seed	■	Cuc p		0.30
Pecan	■	Car i		0.26
Pistachio	●	Pis v 3	7/8S Globulin	0.14
Walnut	●	Jug r 4	11S Globulin	0.11
Cashew	●	Ana o 1	7/8S Globulin	< 0.10



Name	E/M	Allergen	Allergen family	kU _A /L			
Brazil nut		Ana o 2	11S Globulin				< 0.10
		Ber e					< 0.10
Pecan		Ber e 1	2S Albumin				< 0.10
		Car i 1	2S Albumin				< 0.10
		Car i 2 (256-386)	7/8S Globulin				< 0.10
Hazelnut		Car i 4	11S Globulin				< 0.10
		Cor a 1.0401	PR-10				< 0.10
		Cor a 8	nsLTP				< 0.10
Sunflower seed		Hel a					< 0.10
		Hel a 3	nsLTP				< 0.10
Walnut		Jug r 2	7/8S Globulin				< 0.10
		Jug r 3	nsLTP				< 0.10
		Jug r 6	7/8S Globulin				< 0.10
Macadamia		Mac i					< 0.10
		Mac i 1.0101 (28-76)	α-Hairpinin				< 0.10
Poppy seed		Pap s					< 0.10
		Pap s 1.0101 (27-846)	α-Hairpinin				< 0.10
Pine nut		Pin p					< 0.10
		Pin p 1	2S Albumin				< 0.10
Pistachio		Pis v 2	11S Globulin				< 0.10
Almond		Pru du					< 0.10
		Pru du 6	11S Globulin				< 0.10

Spices

Name	E/M	Allergen	Allergen family	kU _A /L			
Mustard		Sin a					< 0.10
		Sin a 1	2S Albumin				< 0.10

Vegetables

Name	E/M	Allergen	Allergen family	kU _A /L			
Onion		All c					< 0.10
Garlic		All s					< 0.10
Celery		Api g 1	PR-10				< 0.10
		Api g 2	nsLTP				< 0.10
		Api g 6	nsLTP				< 0.10
		Api g 7	Plant Defensin				< 0.10
Potato		Sol t					< 0.10
Tomato		Sola l					< 0.10
		Sola l 6	nsLTP				< 0.10



Animal-Based Food

Egg

Name	E/M	Allergen	Allergen family	kU _A /L
Egg yolk	⋮	Gal d_yolk		0.12
Egg white	⋮	Gal d_white		0.11
	⊙	Gal d 1	Ovomucoid	< 0.10
	⊙	Gal d 2	Ovalbumin	< 0.10
	⊙	Gal d 3	Ovotransferrin	< 0.10
	⊙	Gal d 4	Lysozyme C	< 0.10
Egg yolk	⊙	Gal d 5	Serum Albumin	< 0.10

Fish & Seafood

Name	E/M	Allergen	Allergen family	kU _A /L
Anisakis simplex	⊙	Ani s 1	Kunitz Serine Protease Inhibitor	< 0.10
	⊙	Ani s 3	Tropomyosin	< 0.10
Crab	⋮	Chi spp		< 0.10
Herring	⋮	Clu h		< 0.10
	⊙	Clu h 1	β-Parvalbumin	< 0.10
Brown shrimp	⊙	Cra c 6	Troponin C	< 0.10
Carp	⊙	Cyp c 1	β-Parvalbumin	< 0.10
	⊙	Cyp c 2	Enolase	< 0.10
Atlantic cod	⊙	Gad m 1	β-Parvalbumin	< 0.10
Lobster	⋮	Hom g		< 0.10
Shrimp	⋮	Lit spp		< 0.10
Whiteleg shrimp	⊙	Lit v 7	Hemocyanin	< 0.10
Squid	⋮	Lol spp		< 0.10
Giant freshwater prawn	⊙	Mac r 1	Tropomyosin	< 0.10
	⊙	Mac r 2	Arginine Kinase	< 0.10
Northern prawn	⋮	Pan b		< 0.10
Black tiger shrimp	⊙	Pen m 1	Tropomyosin	< 0.10
	⊙	Pen m 2	Arginine Kinase	< 0.10
	⊙	Pen m 3	Myosin Light Chain	< 0.10
	⊙	Pen m 4	Sarcoplasmic Calcium-binding Protein	< 0.10
Thornback ray	⋮	Raj c		< 0.10
	⊙	Raj c Parvalbumin	α-Parvalbumin	< 0.10
Venus clam	⋮	Rud spp		< 0.10
Salmon	⋮	Sal s		< 0.10
	⊙	Sal s 1	β-Parvalbumin	< 0.10
	⊙	Sal s 6	Collagen	< 0.10
Atlantic mackerel	⋮	Sco s		< 0.10
	⊙	Sco s 1	β-Parvalbumin	< 0.10



Name	E/M	Allergen	Allergen family	kU _A /L
Tuna		Thu a 1	β-Parvalbumin	< 0.10
Swordfish		Xip g 1	β-Parvalbumin	< 0.10

Meat

Name	E/M	Allergen	Allergen family	kU _A /L
Rabbit		Ory c_meat		0.39
House cricket		Ach d		< 0.10
Beef		Bos d_meat		< 0.10
		Bos d 6	Serum Albumin	< 0.10
Horse		Equ c_meat		< 0.10
Chicken		Gal d_meat		< 0.10
		Gal d 7	Myosin Light Chain	< 0.10
Migratory locust		Loc m		< 0.10
Turkey		Mel g		< 0.10
Lamb		Ovi a_meat		< 0.10
Pork		Sus d 1	Serum Albumin	< 0.10
Mealworm		Ten m		< 0.10

Milk

Name	E/M	Allergen	Allergen family	kU _A /L
Mare's milk		Equ c_milk		0.11
Cow's milk		Bos d 8	Casein	0.10
		Bos d_milk		< 0.10
		Bos d 4	α-Lactalbumin	< 0.10
		Bos d 5	β-Lactoglobulin	< 0.10
		Bos d 9	α-S1 Casein	< 0.10
		Bos d 10	α-S2 Casein	< 0.10
		Bos d 11	β-Casein	< 0.10
		Bos d 12	κ-Casein	< 0.10
Camel's milk		Cam d		< 0.10
Goat's milk		Cap h_milk		< 0.10
Sheep's milk		Ovi a_milk		< 0.10

Others

CCD

Name	E/M	Allergen	Allergen family	kU _A /L
Hom s Lactoferrin		Hom s LF	CCD	< 0.10

Ficus



Name	E/M	Allergen	Allergen family	kU _A /L
Weeping fig	☐	Fic b		< 0.10

Latex

Name	E/M	Allergen	Allergen family	kU _A /L
Latex	⊙	Hev b 11	Class 1 Chitinase	0.14
	⊙	Hev b 1	Rubber Elongation Factor	< 0.10
	⊙	Hev b 3	Small Rubber Particle Protein	< 0.10
	⊙	Hev b 5	Unknown	< 0.10
	⊙	Hev b 6.02	Pro-Hevein	< 0.10

Parasite

Name	E/M	Allergen	Allergen family	kU _A /L
Pigeon tick	⊙	Arg r 1	Lipocalin	< 0.10

Red meat

Name	E/M	Allergen	Allergen family	kU _A /L
Red meat	⊙	Alpha-GAL	α-Gal	< 0.10

Information to cross-reactive allergens

Storage Proteins

Storage proteins show a limited degree of cross-reactivity.

Storage proteins are major allergens in legumes (e.g. peanut or soy), tree nuts (e.g. wal- or hazelnut) and other seeds (e.g. buckwheat, sesame, mustard). Storage proteins are the major cause of severe allergic reactions, including anaphylaxis. Storage proteins are stable to processing.

Name	E/M	Allergen	Allergen family	kU _A /L
Peanut	⊙	Ara h 6	2S Albumin	10.42
	⊙	Ara h 2	2S Albumin	9.93
Cashew	⊙	Ana o 3	2S Albumin	6.15
Peanut	⊙	Ara h 1	7/8S Globulin	5.96
Hazelnut	⊙	Cor a 14	2S Albumin	2.24
Sesame	⊙	Ses i 1	2S Albumin	1.76
Hazelnut	⊙	Cor a 11	7/8S Globulin	1.69
Peanut	⊙	Ara h 3	11S Globulin	1.45
Walnut	⊙	Jug r 1	2S Albumin	0.79
Pistachio	⊙	Pis v 1	2S Albumin	0.64
Hazelnut	⊙	Cor a 9	11S Globulin	0.35

NPC2

NPC2 allergens show a limited degree of cross-reactivity.

Members of the NPC2 family are present in house dust- and storage mites. The cross-reactivity between Der f 2 and Der p 2 is quite extensive. NPC2 allergens from storage mites show only a limited degree of cross-reactivity to their pendants in house dust mites.

Name	E/M	Allergen	Allergen family	kU _A /L				
European house dust mite		Der p 2	NPC2 Family					> 50.00
American house dust mite		Der f 2	NPC2 Family					> 50.00

Ole e 1

Ole e 1 family allergens show a high degree of cross-reactivity within plant family borders.
The major olive pollen allergen, Ole e 1, represents the prototype of all Ole e 1 family allergens and is the primary sensitiser in regions with olive pollen exposure. Further Ole e 1 related allergens were identified in other trees from the Oleaceae family (ash, lilac, privet). There are further Ole e 1 family members present in grass- and weed pollen.

Name	E/M	Allergen	Allergen family	kU _A /L				
Olive		Ole e 1	Ole e 1 Family					31.62
Ash		Fra e 1	Ole e 1 Family					30.41



The sample was tested on QR code 03EBR148. RAVEN² analysed a total of 300 parameters, of which 22 were positive.

Seasonal (Spring)

Symptoms indicative of allergies in spring time were either absent or not recorded in RAVEN².

Genuine sensitisation to ash was detected without any reported symptoms upon exposure. Sensitisation to ash is suspected to be the primary source of cross-sensitisation to other Oleaceae.

Seasonal (Summer)

Symptoms indicative of allergies in summer were either absent or not recorded in RAVEN².

Perennial

Symptoms indicative of perennial allergies were either absent or not recorded in RAVEN².

Genuine sensitisation to dermatophagoides pteronyssinus was detected without any reported symptoms upon exposure.

Sensitisation to dermatophagoides pteronyssinus is suspected to be the primary source of cross-sensitisation to other domestic mites.

Food

Symptoms indicative of food-related allergies were either absent or not recorded in RAVEN².

Genuine sensitisation to cashew, hazelnut, kiwi, peanut, pistachio, sesame and walnut and IgE-reactivity to chickpea, pumpkin seed and rabbit meat was detected, but symptoms were either absent or not recorded in RAVEN².

Sensitisation to hazelnut, peanut, sesame and walnut are suspected to be the primary sources of cross-sensitisation to other peanut and legumes and cereals and seeds, respectively.

Confirmation of absence of clinical reactivity to tree nuts, peanut and legumes and cereals and seeds might be advisable.

Contact allergens and insect venom

Symptoms indicative of allergies to insects- or arachnid venom were either absent or not recorded in RAVEN².

Total IgE: 259 kU/L

The measured total IgE was 259 kU/L. With a total IgE titre above 100 kU/L, allergy is likely.

Cross-Reactive allergen sensitisation detected

Sensitisations against molecular allergens which are markers of (broad) cross-reactivity between different allergen sources were detected.

Detected cross-reactive allergen sensitisations:

- Cysteine Proteases: Act d 1, Der f 1, Der p 1
- Storage Proteins: Ana o 3, Ara h 1, Ara h 2, Ara h 3, Ara h 6, Cor a 9, Cor a 11, Cor a 14, Jug r 1, Pis v 1, Ses i 1

Cysteine Proteases

Members of the CP allergen family can cause inhalative symptoms, as well as mild to severe forms of food allergy. CP allergens can be found in several fruits, mites and in ragweed pollen. Inhalative symptoms manifest as allergic rhinoconjunctivitis and/or allergic asthma. CP food allergens can cause severe reactions. Fruit CP allergens are resistant to heat and digestion.

Storage Proteins

Members of the storage protein allergen families are able to induce mild and strong allergic reactions and even anaphylactic shock. Allergens of these families can be found in legumes, nuts and seeds. Storage proteins are resistant to heat and digestion. Storage protein allergen families include 2S Albumins, 7/8S & 11S Globulins.

Tree Pollen

Olive family

Sensitisation to pollen from the olive family was detected. Allergic symptoms associated with this allergen source range from allergic rhinoconjunctivitis to allergic asthma.

Fra e 1 / Ole e 1 are members of the Ole e 1 allergen family. The degree of cross-reactivity is very high within the Oleaceae family (e.g. between ash, olive, lilac, privet), not so with more distant relatives (e.g. English Plantain). Fra e 1/Ole e 1 are major allergens from Ash/Olive and serve as markers for AIT indication, if corresponding clinical symptoms are present. Causal treatment is possible via AIT - Fra e 1/Ole e 1 serve as markers for AIT indication, if corresponding clinical symptoms are present. Symptomatic treatment includes anti-histamines and corticosteroids in various formulations (tablet, spray).

Mites and Cockroaches

House dust mites

Sensitisation to house dust mite was detected. Allergic symptoms associated with this allergen source range from allergic rhinoconjunctivitis to asthma.

Der p 1 & Der f 1 are members of the Cystein Protease allergen family (CP). The degree of cross-reactivity between different members of the CP family in different house dust mites is high. Both Der p 1 and Der f 1 serve as markers for AIT indication, if corresponding symptoms are present. Positive results were obtained for: Der f 1, Der p 1.

Der p 2 & Der f 2 are members of the NPC2 allergen family. The degree of cross-reactivity between different members of the NPC2 is very high in different house dust mites and less so to related allergens in storage mites. Both Der p 2 and Der f 2 serve as markers for AIT indication. Positive results were obtained for: Der f 2, Der p 2.

Allergen avoidance is advised. Encasings for blankets, mattresses and pillows can reduce the allergen load. Der f 1/Der p 1 and Der f 2/Der p 2 are major allergens from house dust mite and serve as markers for AIT indication, if corresponding clinical symptoms are present. Symptomatic treatment includes anti-histamines as well as local corticosteroids in various formulations (tablet, spray).

Grains and Seeds

Pumpkin seed

Sensitisation to pumpkin seed was detected. Allergic symptoms associated with pumpkin seed range from oral allergy syndrome to severe anaphylactic reactions.

Include extensive patient training on avoidance measures and the prescription of an emergency kit (including adrenalin autoinjector for severe cases).

Sesame

Sensitisation to sesame was detected. Allergic symptoms associated with sesame allergens range from oral allergy syndrome to severe anaphylactic reactions.

Ses i 1 is a storage protein associated with clinical reactions up to anaphylaxis. The degree of cross-reactivity between storage proteins from sesame and storage proteins from legumes, nuts and seeds is low to moderate. The importance of these cross-reactions has to be analysed on a clinical level. Ses i 1 is stable towards heat and digestion.

Include extensive patient training on avoidance measures and the prescription of an emergency kit (including adrenalin autoinjector for severe cases).

Fruits

Kiwi

Sensitisation to kiwi was detected. Allergic symptoms associated with kiwi allergy range from oral allergy syndrome to severe anaphylactic reactions.

Act d 1 is a member of the Cysteine Protease allergen family (CP). The degree of cross-reactivity to other members of the CP family is presumed low outside different kiwi cultivars.

Act d 1 is stable to heat and digestion.

Include extensive patient training on avoidance measures and the prescription of an emergency kit (including adrenalin autoinjector for severe cases).

Nuts and Legumes

Cashew

Sensitisation to cashew was detected. Allergic symptoms associated with cashew range from oral allergy syndrome to severe anaphylactic reactions.

Ana o 1, 2 and 3 are storage proteins associated with clinical reactions up to anaphylaxis.

The degree of cross-reactivity between storage proteins from cashew and storage proteins from legumes, nuts and seeds is low to moderate. The importance of these cross-reactions has to be analysed on a clinical level. Ana o 2 & 3 are stable towards heat and digestion.

Positive results were obtained for: Ana o 3.

Include extensive patient training on avoidance measures and the prescription of an emergency kit (including adrenalin autoinjector for severe cases).

Chickpea

Sensitisation to Chickpea detected. Allergic symptoms associated with chickpea range from oral allergy syndrome to anaphylaxis. Chickpea allergy may result from primary peanut allergy or occur independently.

Include extensive patient training on avoidance measures and the prescription of an emergency kit (including adrenalin autoinjector for severe cases).

**Hazelnut**

Sensitisation to hazelnut was detected. Allergic symptoms associated with hazelnut allergens range from oral allergy syndrome to severe anaphylactic reactions. Cor a 9, 11 & 14 are storage proteins associated with clinical reactions up to anaphylaxis. The degree of cross-reactivity between storage proteins from hazelnut and storage proteins from legumes, nuts and seeds is low to moderate. The importance of these cross-reactions has to be analysed on a clinical level. Cor a 9, 11 & 14 are stable towards heat and digestion. Positive results were obtained for: Cor a 9, Cor a 11, Cor a 14. Include extensive patient training on avoidance measures and the prescription of an emergency kit (including adrenalin autoinjector for severe cases).

Peanut

Sensitisation to peanut was detected. Allergic symptoms associated with peanut range from oral allergy syndrome to severe anaphylactic reactions. The peanut storage proteins Ara h 1,2,3 and 6 are associated with clinical reactions up to severe anaphylaxis. The degree of cross-reactivity between storage proteins from peanut and storage proteins from legumes, nuts and seeds is low to moderate. The importance of these cross-reactions has to be analysed on a clinical level. Ara h 1,2,3 & 6 are stable towards heat and digestion. Positive results were obtained for: Ara h 1, Ara h 2, Ara h 3, Ara h 6. Include extensive patient training on avoidance measures and the prescription of an emergency kit (including adrenalin autoinjector for severe cases).

Pistachio

Sensitisation to pistachio was detected. Allergic symptoms associated with pistachio range from oral allergy syndrome to anaphylaxis. The pistachio storage proteins Pis v 1,2 and 3 are associated with clinical reactions up to severe anaphylaxis. The degree of cross-reactivity between storage proteins from pistachio and storage proteins from legumes, nuts and seeds is low to moderate, except to Cashew. The importance of these cross-reactions has to be analysed on a clinical level. Pis v 1,2 & 3 are stable towards heat and digestion. Positive results were obtained for: Pis v 1. Include extensive patient training on avoidance measures and the prescription of an emergency kit (including adrenalin autoinjector for severe cases).

Walnut

Sensitisation to walnut was detected. Allergic symptoms associated with walnut allergens range from oral allergy syndrome to severe anaphylactic reactions. Jug r 1,2,4 & 6 are storage proteins associated with clinical reactions up to anaphylaxis. The degree of cross-reactivity between storage proteins from walnut and storage proteins from legumes, nuts and seeds is low to moderate. The exception is Jug r 6, which can cross-react with related allergens from tree nuts (e.g. Cor a 11 from hazelnut) and sesame. The importance of these cross-reactions has to be analysed on a clinical level. Jug r 1,2,4 are stable towards heat and digestion. Jug r 6 displays intermediate thermal stability and susceptibility to digestion. Positive results were obtained for: Jug r 1. Include extensive patient training on avoidance measures and the prescription of an emergency kit (including adrenalin autoinjector for severe cases).

Red Meat**Rabbit meat**

Sensitisation to rabbit-meat was detected. Allergic symptoms associated with rabbit-meat range from gastrointestinal symptoms to anaphylaxis. Rabbit meat allergy can be caused via sensitisation to Serum Albumin, or via sensitisation to alpha-Gal, a heat resistant sugar in non-primate mammals. Clinical reactions to alpha-Gal often have a delay of 3-6 hours. Include extensive patient training on avoidance measures for mild reactions and the prescription of an emergency kit (including adrenalin autoinjector for severe cases). Heat-treatment, or other approaches such as freeze-drying, can decrease the allergenicity of rabbit meat in serum Albumin associated rabbit meat allergy.

DISCLAIMER: THE PRESENCE OF IgE-ANTIBODIES IMPLIES A RISK OF ALLERGIC REACTIONS AND HAS TO BE ANALYZED IN CONJUNCTION WITH THE CLINICAL HISTORY AND OTHER DIAGNOSTIC TEST RESULTS. THE RAVEN INTERPRETATION GUIDANCE SOFTWARE IS A TOOL TO SUPPORT PHYSICIANS IN THE INTERPRETATION OF ALEX RESULTS. RAVEN COMMENTS DO NOT REPLACE THE DIAGNOSIS BY A PHYSICIAN. NO LIABILITY IS ACCEPTED FOR RAVEN COMMENTS AND RESULTING THERAPEUTIC INTERVENTIONS. THE STATED COMMENTS ARE DESIGNED EXCLUSIVELY FOR ALEX RESULTS.



ALEX³ – Number of tested allergen sources

Grass Pollen 6 Bahia grass, Bermuda grass, Common reed, Maize pollen, Rye pollen, Timothy grass	Legumes 5 Chickpea, Lentil, Pea, Peanut, Soy	Milk 5 Camel's milk, Cow's milk, Goat's milk, Mare's milk, Sheep's milk
Tree Pollen 14 Acacia, Alder, Arizona cypress, Ash, Cypress, London plane tree, Mountain cedar, Oak, Olive, Paper mulberry, Silver birch, Sugi, Tree of heaven, Walnut	Grains 10 Barley, Buckwheat, Cultivated rye, Lupine seed, Maize, Millet, Oat, Quinoa, Spelt, Wheat	Egg 2 Egg white, Egg yolk
Weed Pollen 8 Hemp, Lamb's quarter, Mugwort, Pigweed, Ragweed, Ribwort, Russian thistle, Wall pellitory	Spices 1 Mustard	Fish & Seafood 19 Anisakis simplex, Atlantic cod, Atlantic mackerel, Black tiger shrimp, Brown shrimp, Carp, Crab, Giant freshwater prawn, Herring, Lobster, Northern prawn, Salmon, Shrimp, Squid, Swordfish, Thornback ray, Tuna, Venus clam, Whiteleg shrimp
House Dust Mites & Storage Mites 7 Acarus siro, American house dust mite, Blomia tropicalis, European house dust mite, Glycyphagus domesticus, Lepidoglyphus destructor, Tyrophagus putrescentiae	Fruits 14 Apple, Avocado, Banana, Cherry, Coconut, Fig, Grape, Kiwi, Mango, Muskmelon, Papaya, Peach, Pear, Strawberry	Meat 10 Beef, Chicken, Horse, House cricket, Lamb, Mealworm, Migratory locust, Pork, Rabbit, Turkey
Vegetables 5 Celery, Garlic, Onion, Potato, Tomato	Cockroach 2 American cockroach, German cockroach	Pets 9 Cat, Djungarian hamster, Dog, Dog urine (incl. Can f 5), Golden hamster, Guinea pig, Mouse, Rabbit, Rat
Nuts & Seeds 13 Almond, Brazil nut, Cashew, Hazelnut, Macadamia, Pecan, Pine nut, Pistachio, Poppy seed, Pumpkin seed, Sesame, Sunflower seed, Walnut	Ant, Bee, Wasp, Hornet 5 Bald-faced Hornet, Common wasp, Fire ant, Honey bee, Paper wasp	Farm Animals 4 Cattle, Goat, Horse, Pig
	Fungal Spores & Yeast 5 Alternaria alternata, Aspergillus fumigatus, Cladosporium herbarum, Malassezia sympodialis, Penicillium chrysogenum	Others 5 Human Lactoferrin, Latex, Pigeon tick, Red meat, Weeping fig