

877.485.5336



#### **PATIENT ID**



PATIENT NAME



👤 Ima T Sample





SAMPLE ID



Sample Report

**BARCODE** 



**TESTED ALLERGENS** 



TEST METHOD



APPROVED ON

REFERRING PHYSICIAN

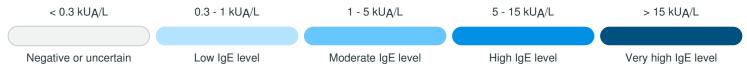
#### ADDITIONAL INFORMATION

The internal QC (Plausibility check for GD) was within acceptance range.

# Lab report: Summary on detectable sensitizations

#### **POLLEN MICROORGANISMS** Grass Pollen Fungal Spores & Yeast Tree Pollen ANIMAL-DERIVED FOOD Weed Pollen Milk **MITES** Egg House Dust Mites & Storage Mites Fish & Seafood Meat PLANT-BASED FOOD **EPITHELIAL TISSUES OF ANIMALS** Legumes Grains Pets **Spices** Farm Animals Fruits **OTHERS** Vegetables Latex Nuts & Seeds Ficus **INSECTS & VENOMS** CCD Ant, Bee, Wasp Parasite Cockroach

#### Highest measured IgE concentration per allergen group









| Name                   | E/M                 | Allergen     | Protein Family      |        | kU <sub>A</sub> /L |
|------------------------|---------------------|--------------|---------------------|--------|--------------------|
| POLLEN                 |                     |              |                     |        |                    |
| Grass Pollen           |                     |              |                     |        |                    |
| Bermuda grass          | 000                 | Cyn d        |                     | 3.13   |                    |
|                        | •                   | Cyn d 1      | Beta-Expansin       | 7.41   |                    |
| Perennial Ryegrass     | •                   | Lol p 1      | Beta-Expansin       | 12.79  |                    |
| Bahia grass            | • • •               | Pas n        |                     | ≤ 0.10 |                    |
| Timothy grass          | •                   | Phl p 1      | Beta-Expansin       | 19.44  |                    |
|                        | •                   | Phl p 2      | Expansin            | 10.58  |                    |
|                        | •                   | Phl p 5.0101 | Grass Group 5/6     | 37.82  |                    |
|                        | •                   | Phl p 6      | Grass Group 5/6     | 4.39   |                    |
|                        | •                   | Phl p 7      | Polcalcin           | ≤ 0.10 |                    |
|                        | •                   | Phl p 12     | Profilin            | ≤ 0.10 |                    |
| Common reed            | 0 0 0<br>0 0<br>0 0 | Phr c        |                     | ≤ 0.10 |                    |
| Cultivated rye, Pollen | 000                 | Sec c_pollen |                     | 0.68   |                    |
| Acacia Trace of Hagyan |                     | Aca m        | 1                   | ≤ 0.10 |                    |
| Tree Pollen            | 000                 | 1.           |                     | 1010   |                    |
| 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               | 0.28   |                    |
|                        | •                   | Bet v 2      | Profilin            | ≤ 0.10 |                    |
|                        | •                   | Bet v 6      | Isoflavon Reductase | ≤ 0.10 |                    |
| Paper mulberry         | • • •               | Bro pa       |                     | ≤ 0.10 |                    |
| Hazel pollen           | • • •               | Cor a_pollen |                     | ≤ 0.10 |                    |
|                        | •                   | Cor a 1.0103 | PR-10               | ≤ 0.10 |                    |
| Sugi                   | •                   | Cry j 1      | Pectate Lyase       | ≤ 0.10 |                    |
| Cypress                | •                   | Cup a 1      | Pectate Lyase       | ≤ 0.10 |                    |
|                        | 0 0 0<br>0 0<br>0 0 | Cup s        |                     | ≤ 0.10 |                    |
| Beech                  | •                   | Fag s 1      | PR-10               | ≤ 0.10 |                    |
| Ash                    | 000                 | Fra e        |                     | ≤ 0.10 |                    |
|                        | •                   | Fra e 1      | Ole e 1-Family      | ≤ 0.10 |                    |
| Walnut pollen          | •••                 | Jug r_pollen |                     | ≤ 0.10 |                    |









| Name              | E/M Allergen | Protein Family    |        | kU <sub>A</sub> /L |
|-------------------|--------------|-------------------|--------|--------------------|
| Mountain cedar    | Jun a        |                   | ≤ 0.10 |                    |
| Mulberry          | Morr         |                   | ≤ 0.10 |                    |
| Olive             | Ole e 1      | Ole e 1-Family    | ≤ 0.10 |                    |
|                   | Ole e 9      | 1,3 β Glucanase   | ≤ 0.10 |                    |
| Date palm         | Pho d 2      | Profilin          | ≤ 0.10 |                    |
| London plane tree | Pla a 1      | Plant Invertase   | ≤ 0.10 |                    |
|                   | Pla a 2      | Polygalacturonase | ≤ 0.10 |                    |
|                   | Pla a 3      | nsLTP             | ≤ 0.10 |                    |
| Cottonwood        | Pop n        |                   | ≤ 0.10 |                    |
| Ulme              | Ulm c        |                   | ≤ 0.10 |                    |

## **Weed Pollen**

| Common Pigweed  | Ama r     |                       | ≤ 0.10 |
|-----------------|-----------|-----------------------|--------|
| Ragweed         | Amb a     |                       | ≤ 0.10 |
|                 | Amb a 1   | Pectate Lyase         | 0.23   |
|                 | Amb a 4   | Plant Defensin        | ≤ 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 |
|                 | Oan s 3   | nsLTP                 | ≤ 0.10 |
| Lamb's quarter  | Che a     |                       | ≤ 0.10 |
|                 | • Che a 1 | Ole e 1-Family        | ≤ 0.10 |
| Annual mercury  | Mer a 1   | Profilin              | ≤ 0.10 |
| Wall pellitory  | Par j     |                       | ≤ 0.10 |
|                 | Par j 2   | nsLTP                 | ≤ 0.10 |
| Ribwort         | Pla I     |                       | ≤ 0.10 |
|                 | Pla I 1   | Ole e 1-Family        | ≤ 0.10 |
| Russian thistle | Sal k     |                       | ≤ 0.10 |
|                 | Sal k 1   | Pectin Methylesterase | ≤ 0.10 |
| Nettle          | Urt d     |                       | ≤ 0.10 |









| Name | E/M | Allergen | Protein Family | kU <sub>A</sub> /L |
|------|-----|----------|----------------|--------------------|
|------|-----|----------|----------------|--------------------|

## **MITES**

# **House Dust Mite**

| American house dust mite | Der f 1                    | Cysteine protease               | 0.58   |
|--------------------------|----------------------------|---------------------------------|--------|
|                          | Der f 2                    | NPC2 Family                     | 1.24   |
| European house dust mite | Der p 1                    | Cysteine protease               | 1.11   |
|                          | Der p 2                    | NPC2 Family                     | 1.08   |
|                          | Der p 5                    | unknown                         | ≤ 0.10 |
|                          | Der p 7                    | Mites, Group 7                  | ≤ 0.10 |
|                          | <ul><li>Der p 10</li></ul> | Tropomyosin                     | ≤ 0.10 |
|                          | <ul><li>Der p 11</li></ul> | Myosin, heavy chain             | ≤ 0.10 |
|                          | <ul><li>Der p 20</li></ul> | Arginine kinase                 | ≤ 0.10 |
|                          | <ul><li>Der p 21</li></ul> | unknown                         | ≤ 0.10 |
|                          | <ul><li>Der p 23</li></ul> | Peritrophin-like protein domain | 0.65   |

# **Storage Mite**

| Acarus siro              | Aca s                      |                | ≤ 0.10 |
|--------------------------|----------------------------|----------------|--------|
| Blomia tropicalis        | Blo t 5                    | Mites, Group 5 | ≤ 0.10 |
|                          | <ul><li>Blo t 10</li></ul> | Tropomyosin    | ≤ 0.10 |
|                          | <ul><li>Blo t 21</li></ul> | unknown        | ≤ 0.10 |
| Glycyphagus domesticus   | <ul><li>Gly d 2</li></ul>  | NPC2 Family    | ≤ 0.10 |
| Lepidoglyphus destructor | Lep d 2                    | NPC2 Family    | ≤ 0.10 |
| Tyrophagus putrescentiae | Tyr p                      |                | ≤ 0.10 |
|                          | ● Tyr p 2                  | NPC2 Family    | ≤ 0.10 |

## **MICROORGANISMS & SPORES**

#### Yeast

| Malassezia sympodialis | Mala s 5  | unknown                | ≤ 0.10 |
|------------------------|-----------|------------------------|--------|
|                        | Mala s 6  | Cyclophilin            | ≤ 0.10 |
|                        | Mala s 11 | Mn Superoxid-Dismutase | ≤ 0.10 |
| Yeast                  | Sac c     |                        | ≤ 0.10 |









| Name | E/M | Allergen | Protein Family | kU <sub>A</sub> /L |
|------|-----|----------|----------------|--------------------|
|      |     |          |                |                    |

#### **Moulds**

| Alternaria alternata   | Alt a 1 | Alt a 1-Family            | ≤ 0.10 |
|------------------------|---------|---------------------------|--------|
|                        | Alt a 6 | Enolase                   | ≤ 0.10 |
| Aspergillus fumigatus  | Asp f 1 | Mitogillin Family         | ≤ 0.10 |
|                        | Asp f 3 | Peroxysomal Protein       | ≤ 0.10 |
|                        | Asp f 4 | unknown                   | ≤ 0.10 |
|                        | Asp f 6 | Mn Superoxid-Dismutase    | ≤ 0.10 |
| Cladosporium herbarum  | Cla h   |                           | ≤ 0.10 |
|                        | Ola h 8 | Short Chain Dehydrogenase | ≤ 0.10 |
| Penicilium chrysogenum | Pen ch  |                           | ≤ 0.10 |

# **PLANT FOOD**

# Legumes

| Peanut     | Ara h 1                    | 7/8S Globulin | ≤ 0.10 |
|------------|----------------------------|---------------|--------|
|            | Ara h 2                    | 2S Albumin    | ≤ 0.10 |
|            | Ara h 3                    | 11S Globulin  | ≤ 0.10 |
|            | Ara h 6                    | 2S Albumin    | ≤ 0.10 |
|            | Ara h 8                    | PR-10         | ≤ 0.10 |
|            | Ara h 9                    | nsLTP         | ≤ 0.10 |
|            | <ul><li>Ara h 15</li></ul> | Oleosin       | 0.17   |
| Chickpea   | Cic a                      |               | ≤ 0.10 |
| Soy        | ● Gly m 4                  | PR-10         | ≤ 0.10 |
|            | Gly m 5                    | 7/8S Globulin | ≤ 0.10 |
|            | Gly m 6                    | 11S Globulin  | ≤ 0.10 |
|            | Gly m 8                    | 2S Albumin    | ≤ 0.10 |
| Lentil     | Len c                      |               | ≤ 0.10 |
| White bean | Pha v                      |               | ≤ 0.10 |
| Pea        | Pis s                      | 1             | ≤ 0.10 |

#### **Cereals**

| Oat    | Ave s | ≤ 0.10 |
|--------|-------|--------|
| Quinoa | Che q | ≤ 0.10 |









| Name             | E/M Allergen | Protein Family                      |        | kU <sub>A</sub> /L |
|------------------|--------------|-------------------------------------|--------|--------------------|
| Common buckwheat | Fag e        |                                     | ≤ 0.10 |                    |
|                  | ● Fag e 2    | 2S Albumin                          | ≤ 0.10 |                    |
| Barley           | Hor v        |                                     | ≤ 0.10 |                    |
| Lupine seed      | Lup a        |                                     | ≤ 0.10 |                    |
| Rice             | Ory s        |                                     | ≤ 0.10 |                    |
| Millet           | Pan m        |                                     | ≤ 0.10 |                    |
| Cultivated rye   | Sec c_flour  |                                     | ≤ 0.10 |                    |
| Wheat            | │            | Alpha-Amylase Trypsin-<br>Inhibitor | ≤ 0.10 |                    |
|                  | ●   Tri a 14 | nsLTP                               | ≤ 0.10 |                    |
|                  | ●   Tri a 19 | Omega-5-Gliadin                     | ≤ 0.10 |                    |
| Spelt            | Tri s        |                                     | ≤ 0.10 |                    |
| Maize            | Zea m        |                                     | ≤ 0.10 |                    |
|                  | ⊙ Zea m 14   | nsLTP                               | ≤ 0.10 |                    |

# **Spices**

| Paprika | Cap a     |            | ≤ 0.10 |
|---------|-----------|------------|--------|
| Caraway | Car c     |            | ≤ 0.10 |
| Oregano | Ori v     |            | ≤ 0.10 |
| Parsley | Pet c     |            | ≤ 0.10 |
| Anise   | Pim a     |            | ≤ 0.10 |
| Mustard | Sin       |            | ≤ 0.10 |
|         | ⊙ Sin a 1 | 2S Albumin | ≤ 0.10 |

# **Fruit**

| Kiwi       | Act d 1                    | Cysteine protease | ≤ 0.10 |
|------------|----------------------------|-------------------|--------|
|            | Act d 2                    | TLP               | ≤ 0.10 |
|            | Act d 5                    | Kiwellin          | ≤ 0.10 |
|            | <ul><li>Act d 10</li></ul> | nsLTP             | ≤ 0.10 |
| Papaya     | Car p                      |                   | ≤ 0.10 |
| Orange     | Cit s                      |                   | ≤ 0.10 |
| Melon      | ● Cuc m 2                  | Profilin          | ≤ 0.10 |
| Fig        | Fic c                      |                   | ≤ 0.10 |
| Strawberry | ● Fra a 1+3                | PR-10+LTP         | ≤ 0.10 |









| Name      | E/M   | Allergen | Protein Family |        | kU <sub>A</sub> /L |
|-----------|-------|----------|----------------|--------|--------------------|
| Apple     | •     | Mal d 1  | PR-10          | ≤ 0.10 |                    |
|           | •     | Mal d 2  | TLP            | ≤ 0.10 |                    |
|           | •     | Mal d 3  | nsLTP          | ≤ 0.10 |                    |
| Mango     | ***   | Man i    |                | ≤ 0.10 |                    |
| Banana    | • • • | Mus a    |                | ≤ 0.10 |                    |
| Avocado   | • • • | Pers a   |                | ≤ 0.10 |                    |
| Cherry    | • • • | Pru av   |                | ≤ 0.10 |                    |
| Peach     | •     | Pru p 3  | nsLTP          | ≤ 0.10 |                    |
| Pear      | • • • | Pyr c    |                | ≤ 0.10 |                    |
| Blueberry | • • • | Vac m    |                | ≤ 0.10 |                    |
| Grapes    | •     | Vit v 1  | nsLTP          | ≤ 0.10 |                    |

# **Vegetables**

| Onion  | All c    |       | ≤ 0.10 |
|--------|----------|-------|--------|
| Garlic | Alls     |       | ≤ 0.10 |
| Celery | Api g 1  | PR-10 | ≤ 0.10 |
|        | Api g 2  | nsLTP | ≤ 0.10 |
|        | Api g 6  | nsLTP | ≤ 0.10 |
| Carrot | Dau c    |       | ≤ 0.10 |
|        | Dau c 1  | PR-10 | ≤ 0.10 |
| Potato | Sol t    |       | ≤ 0.10 |
| Tomato | Sola I   |       | ≤ 0.10 |
|        | Sola I 6 | nsLTP | ≤ 0.10 |

#### **Nuts**

| Cashew     | Ana o                          |              | ≤ 0.10 |
|------------|--------------------------------|--------------|--------|
|            | • Ana o 2                      | 11S Globulin | ≤ 0.10 |
|            | Ana o 3                        | 2S Albumin   | ≤ 0.10 |
| Brazil nut | Ber e                          |              | ≤ 0.10 |
|            | Ber e 1                        | 2S Albumin   | ≤ 0.10 |
| Pecan      | Cari                           |              | ≤ 0.10 |
| Hazelnut   | <ul><li>Cor a 1.0401</li></ul> | PR-10        | ≤ 0.10 |
|            | Ocor a 8                       | nsLTP        | ≤ 0.10 |







| Name      | E/M Allergen               | Protein Family       |        | kU <sub>A</sub> /L |
|-----------|----------------------------|----------------------|--------|--------------------|
|           | ● Cor a 9                  | 11S Globulin         | ≤ 0.10 |                    |
|           | <ul><li>Cor a 11</li></ul> | 7/8S Globulin        | ≤ 0.10 |                    |
|           | Oor a 14                   | 2S Albumin           | ≤ 0.10 |                    |
| Walnut    | ● Jug r 1                  | 2S Albumin           | ≤ 0.10 |                    |
|           | O Jug r 2                  | 7/8S Globulin        | ≤ 0.10 |                    |
|           | ● Jugr3                    | nsLTP                | ≤ 0.10 |                    |
|           | O Jug r 4                  | 11S Globulin         | ≤ 0.10 |                    |
|           | ● Jugr6                    | 7/8S Globulin        | ≤ 0.10 |                    |
| Macadamia | Mac i 2S Albumin           | 2S Albumin           | ≤ 0.10 |                    |
|           | Mac inte                   |                      | ≤ 0.10 |                    |
| Pistachio | ● Pis v 1                  | 2S Albumin           | ≤ 0.10 |                    |
|           | Pis v 2                    | 11S Globulin subunit | ≤ 0.10 |                    |
|           | Pis v 3                    | 7/8S Globulin        | ≤ 0.10 |                    |
| Almond    | Pru du                     |                      | ≤ 0.10 |                    |

#### Seed

| Pumpkin seed    | Cuc p                       | ≤ 0.10 |
|-----------------|-----------------------------|--------|
| Sunflower seed  | Hel a                       | ≤ 0.10 |
| Poppy seed      | Pap s                       | ≤ 0.10 |
|                 | Pap s 2S Albumin 2S Albumin | ≤ 0.10 |
| Sesame          | Ses i                       | ≤ 0.10 |
|                 | Ses i 1                     | ≤ 0.10 |
| Fenugreek seeds | Tri fo                      | ≤ 0.10 |

# **ANIMAL FOOD**

#### Milk

| Cow, milk   | Bos d_milk |                 | ≤ 0.10 |
|-------------|------------|-----------------|--------|
|             | Bos d 4    | α-Lactalbumin   | ≤ 0.10 |
|             | Bos d 5    | β-Lactoglobulin | ≤ 0.10 |
|             | Bos d 8    | Casein          | ≤ 0.10 |
| Camel       | Cam d      |                 | ≤ 0.10 |
| Goat, milk  | Cap h_milk |                 | ≤ 0.10 |
| Mare's milk | Equ c_milk |                 | ≤ 0.10 |











| Name               | E/M Allergen              | Protein Family                          |        | kU <sub>A</sub> /L |
|--------------------|---------------------------|---|--------|--------------------|
| Sheep, milk        | Ovi a_milk                |   | ≤ 0.10 |                    |
| Egg                |                           |   |        |                    |
| Egg white          | Gal d_white               |   | ≤ 0.10 |                    |
| Egg yolk           | Gal d_yolk                |   | ≤ 0.10 |                    |
| Egg white          | Gal d 1                   | Ovomucoid                               | ≤ 0.10 |                    |
|                    | Gal d 2                   | Ovalbumin                               | ≤ 0.10 |                    |
|                    | Gal d 3                   | Ovotransferrin                          | ≤ 0.10 |                    |
|                    | Gal d 4                   | Lysozym C                               | ≤ 0.10 |                    |
| Egg yolk           | Gal d 5                   | Serum Albumin                           | ≤ 0.10 |                    |
|                    |                           |   |        |                    |
| Seafood            |                           |   |        |                    |
| Herring worm       | Ani s 1                   | Kunitz Serin Protease<br>Inhibitor      | ≤ 0.10 |                    |
|                    | Ani s 3                   | Tropomyosin                             | ≤ 0.10 |                    |
| Crab               | Chi spp.                  |   | ≤ 0.10 |                    |
| Herring            | Clu h                     |   | ≤ 0.10 |                    |
|                    | Olu h 1                   | β-Parvalbumin                           | ≤ 0.10 |                    |
| Brown shrimp       | ⊙ Cra c 6                 | Troponin C                              | ≤ 0.10 |                    |
| Carp               | <ul><li>Cyp c 1</li></ul> | β-Parvalbumin                           | ≤ 0.10 |                    |
| Atlantic cod       | Gad m                     |   | ≤ 0.10 |                    |
|                    | ● Gad m 2+3               | β-Enolase & Aldolase                    | ≤ 0.10 |                    |
|                    | ● Gad m 1                 | β-Parvalbumin                           | ≤ 0.10 |                    |
| Lobster            | Hom g                     |   | ≤ 0.10 |                    |
| Shrimp             | Lit s                     |   | ≤ 0.10 |                    |
| Squid              | Lol spp.                  |   | ≤ 0.10 |                    |
| Common mussel      | Myt e                     |   | ≤ 0.10 |                    |
| Oyster             | Ost e                     |   | ≤ 0.10 |                    |
| Shrimp             | Pan b                     |   | ≤ 0.10 |                    |
| Scallop            | Pec spp.                  |   | ≤ 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<br>Binding Protein | ≤ 0.10 |                    |









| Name              | E/M   | Allergen          | Protein Family |        | kU <sub>A</sub> /L |
|-------------------|-------|-------------------|----------------|--------|--------------------|
| Thornback ray     | 000   | Raj c             |                | ≤ 0.10 |                    |
|                   | •     | Raj c Parvalbumin | α-Parvalbumin  | ≤ 0.10 |                    |
| Clam              | •••   | Rud spp.          |                | ≤ 0.10 |                    |
| Salmon            | •••   | Sals              |                | ≤ 0.10 |                    |
|                   | •     | Sal s 1           | β-Parvalbumin  | ≤ 0.10 |                    |
| Atlantic mackerel | • • • | Sco s             |                | ≤ 0.10 |                    |
|                   | •     | Sco s 1           | β-Parvalbumin  | ≤ 0.10 |                    |
| Tuna              | • • • | Thu a             |                | ≤ 0.10 |                    |
|                   | •     | Thu a 1           | β-Parvalbumin  | ≤ 0.10 |                    |
| Swordfish         | •     | Xip g 1           | β-Parvalbumin  | ≤ 0.10 |                    |

#### Meat

| House cricket    |       | Ach d      |               | ≤ 0.10 |
|------------------|-------|------------|---------------|--------|
| Cattle, meat     | •••   | Bos d_meat | I             | ≤ 0.10 |
|                  | •     | Bos d 6    | Serum Albumin | ≤ 0.10 |
| Horse, meat      | •••   | Equ c_meat | I             | ≤ 0.10 |
| Chicken meat     | • • • | Gal d_meat |               | ≤ 0.10 |
| Migratory locust | •••   | Loc m      | I             | ≤ 0.10 |
| Turkey           | • • • | Mel g      |               | ≤ 0.10 |
| Rabbit, meat     | •••   | Ory_meat   | I             | ≤ 0.10 |
| Sheep, meat      | •••   | Ovi a_meat |               | ≤ 0.10 |
| Pork             | •••   | Sus d_meat | I             | ≤ 0.10 |
|                  | •     | Sus d 1    | Serum Albumin | ≤ 0.10 |
| Mealworm         | • • • | Ten m      |               | 0.26   |

## **INSECTS & VENOMS**

# Fire ant poison

| Fire ant | Sol spp. | ≤ 0.10 |
|----------|----------|--------|
|----------|----------|--------|

# **Honey Bee Venom**

| Honey bee | Api m    |                    | ≤ 0.10 |
|-----------|----------|--------------------|--------|
|           | Api m 1  | Phospholipase A2   | ≤ 0.10 |
|           | Api m 10 | Icarapin Variant 2 | ≤ 0.10 |









| Name | E/M | Allergen | Protein Family | kU <sub>A</sub> /L |
|------|-----|----------|----------------|--------------------|
|      |     |          |                |                    |

# **Wasp Venom**

| Hornet           | Dol spp |                  | ≤ 0.10 |
|------------------|---------|------------------|--------|
| Paper wasp venom | Pol d   |                  | ≤ 0.10 |
|                  | Pol d 5 | Antigen 5        | ≤ 0.10 |
| Wasp venom       | Ves v   | 1                | ≤ 0.10 |
|                  | Ves v 1 | Phospholipase A1 | ≤ 0.10 |
|                  | Ves v 5 | Antigen 5        | 0.81   |

## Cockroach

| German Cockroach   | ●   Bla g 1 | Cockroach Group 1         | ≤ 0.10 |
|--------------------|-------------|---------------------------|--------|
|                    | ● Bla g 2   | Aspartyl 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 7     | Tropomyosin               | ≤ 0.10 |

## **ANIMAL ORIGIN**

#### Pet

| Dog                            | Can f_Fd1 Uteroglobin     | ≤ 0.10 |
|--------------------------------|---------------------------|--------|
| Male 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       | 0.65   |
|                                | Fel d 2     Serum Albumin | ≤ 0.10 |
|                                | Fel d 4 Lipocalin         | ≤ 0.10 |
|                                | Fel d 7 Lipocalin         | ≤ 0.10 |
| House mouse                    | Mus m 1 Lipocalin         | ≤ 0.10 |









| Name               | E/M Allergen | Protein Family | kU <sub>A</sub> /L |
|--------------------|--------------|----------------|--------------------|
| Rabbit, epithel    | Ory c 1      | Lipocalin      | ≤ 0.10             |
|                    | Ory c 2      | Lipophilin     | ≤ 0.10             |
|                    | Ory c 3      | Uteroglobin    | ≤ 0.10             |
| Djungarian hamster | Phod s 1     | Lipocalin      | ≤ 0.10             |
| Rat                | Rat n        |                | ≤ 0.10             |

#### **Farm Animals**

| Cattle         | ● Bos d 2 Lipocalin | ≤ 0.10        |
|----------------|---------------------|---------------|
| Goat, epithel  | Cap h_epithelia     | ≤ 0.10        |
| Horse, epithel | ● Equ c 1 Lipocalin | ≤ 0.10        |
|                | Equ c 3 Serum A     | lbumin ≤ 0.10 |
|                | ● Equ c 4 Latherin  | ≤ 0.10        |
| Sheep, epithel | Ovi a_epithelia     | ≤ 0.10        |
| Pig            | Sus d_epithelia     | ≤ 0.10        |

## **OTHERS**

#### Latex

| Latex | 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 |
|       | Hev b 8                    | Profilin                      | ≤ 0.10 |
|       | <ul><li>Hev b 11</li></ul> | Class 1 Chitinase             | ≤ 0.10 |

#### **Ficus**

| Weeping fig | Fic b | ≤ 0.10 |
|-------------|-------|--------|

#### Ccd

| Home Lactoferrin | CCD | ≤ 0.10 |
|------------------|-----|--------|
|------------------|-----|--------|

#### **Parasite**











# Total IgE: 56 kU/L

**Normal Total-IgE** 

Adults: < 20 kU/L Allergy unlikely, 20 - 100 kU/L Allergy possible, > 100 kU/L Allergy likely







# Number of tested allergen sources:

165



#### GRASS POLLEN

Bahia grass, Bermuda grass, Common reed, Perennial ryegrass, Rye, Timothy grass



#### COCKROACH

American cockroach, German cockroach



#### TREE POLLEN

Acacia, Alder, Arizona Cypress, European Ash, Beech, Cottonwood, Date palm, Elm, Hazel, London Plane Tree, Mediterranean Cypress, Mountain cedar, Mulberry, Olive, Paper mulberry, Silver birch, Sugi, Tree of Heaven, Walnut



#### INSECT VENOMS

Common wasp venom, Fire ant venom, Honeybee venom, Long-headed wasp venom, Paper wasp venom



#### FUNGAL SPORES & YEAST

Alternaria alternata, Aspergillus fumigatus, Baker's yeast, Cladosporium herbarum, Malassezia sympodialis, Penicilium chrysogenum



#### WEED POLLEN

Annual mercury, Hemp, Lamb's quarter, Mugwort, Nettle, Pigweed, Ragweed, Ribwort, Russian thistle, Wall pellitory



10

6

11

6

6

#### MILK

Camel's milk, Cow's milk, Goat's milk, Mare's milk, Sheep's milk



#### **HOUSE DUST MITES & STORAGE MITES**

Acarus siro, American house dust mite, Blomia tropicalis, European house dust mite, Glycyphagus domesticus, Lepidoglyphus destructor, Tyrophagus putrescentiae



#### **EGG**

Egg white, Egg yolk



#### FISH & SEAFOOD

20

5

Anisakis simplex, Atlantic cod, Atlantic herring, Atlantic mackerel, Black-Tiger shrimp, Brown shrimp, Carp, Common mussel, Crab, Lobster, Northern prawn, Oyster, Salmon, Scallop, Shrimp mix, Squid, Swordfish, Thornback ray, Tuna, Venus clam



#### LEGUMES

Chickpea, White bean, Lentil, Pea, Peanut, Soy

Oat, Quinoa, Rice, Spelt, Wheat



#### MEAT

10 Beef, Chicken, Horse, House cricket, Lamb, Mealworm,



# **SPICES**

**GRAINS** 

Anise, Caraway, Mustard, Oregano, Paprika, Parsley

Barley, Buckwheat, Corn, Cultivated rye, Lupine, Millet,



#### **PETS**

Cat, Djungarian hamster, Dog, Guinea pig, Mouse, Rabbit,



#### **FRUITS**

15

Avocado, Apple, Banana, Blueberry, Cherry, Fig, Grape, Kiwi, Mango, Muskmelon, Orange, Papaya, Peach, Pear, Strawberry



# FARM ANIMALS

Cattle, Goat, Horse, Pig, Sheep

Migratory locust, Pig, Rabbit, Turkey

# VEGETABLES

Carrot, Celery, Garlic, Onion, Potato, Tomato



Latex, Hom s lactoferrin, Pigeon tick, Weeping fig



#### **NUTS & SEEDS**

13 Almond, Brazil nut, Cashew, Hazelnut, Macadamia,

Pecan, Pistachio, Walnut, Fenugreek seeds, Poppy seed, Pumpkin seed, Sesame, Sunflower seed











# Interpretation - Support

## **Raven Interpretation Summary**

#### Sample Information

| The sample was tested on ALL Barcode        | , interpretation date                        |                              |                                     |
|---|--|------------------------------|-------------------------------------|
| Of the tested 295 allergens, 15 were/was    | above the cut off of 0.3 kU <sub>A</sub> /L. | A sensitization can be an ir | dicator of an IgE dependent allergy |
| For all positive ALL Allergy Test allergens | s, comments for interpretation o             | guidance are listed below.   |                                     |

#### Total IgE: 56 kU/L

The measured total IgE was 56 kU/L. With a total IgE titre of below 100 kU/L, allergy is possible but unlikely.

#### Cross-Reactive allergen sensitization detected

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

Detected cross-reactive allergen sensitizations:

• Cysteine Proteases: Der f 1, Der p 1

#### **Cysteine Proteases**

Members of the Cysteine Protease (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 (e.g., kiwi, papaya, fig, pineapple), mites and in ragweed pollen. Associated allergic symptoms include hay fever (allergic rhinoconjunctivitis) and/or allergic asthma. CP food allergens can cause severe reactions and are resistant to heat and digestion.

#### Grass pollen

You have a sensitization to grass pollen.

Associated allergic reactions range from hay fever (allergic rhinoconjunctivitis) to allergic asthma.

Cyn d 1, Lol p 1 and Phl p 1 are members fo the β-Expansin allergen family. The potential for cross-reactions between members of this allergen family is very high. Allergen-specific immunotherapy (AIT) for β-Expansins is possible, if corresponding clinical symptoms are present. Positive results were obtained for: Cyn d 1, Lol p 1, Phl p 1.

Phl p 2 is a member of the Expansin allergen family.

The potential for cross-reactions between allergens of this family is very high.

Along with PhI p 1 and 5, PhI p 2 serves as a marker of true grass-pollen sensitization. Patients with isolated sensitization to PhI p 2 are not suitable candidates for allergen-specific immunotherapy (AIT).

Phl p 5 is a member of the Grass Group 5/6 allergen family.

The potential for cross-reactions between allergens of this family is high, although not in all grass pollen species.

Along with Phl p 1 and Phl p 2, Phl p 5 serves as marker of true grass-pollen sensitization.

Allergen-specific immunotherapy (AIT) is possible for sensitization to PhI p 1 and 5, if corresponding clinical symptoms occur.

Phl p 6 is a member of the Grass Group 5/6 allergen family.

The potential for cross-reactions between allergens of this family is high.











Treatment for symptoms includes anti-histamines as well as corticosteroid tablets and sprays. Causal treatmet is possible for sensitizations to PhI p 1 and 5 via allergy-specific immunotherapy (AIT) is possible, if corresponding clinical symptoms occur.

#### **Furry Animals**

#### Cat

You have a sensitization to cat.

Associated allergic symptoms range from hay fever (allergic rhinoconjunctivitis) to allergic asthma.

Fel d 1 is a member of the Uteroglobin (UG) allergen family and a marker for genuine cat allergy.

The potential for cross-reactions between Fel d 1 and other allergens of the UG family is low to moderate.

Allergen-specific immunotherapy (AIT) is possible, if corresponding clinical symptoms occur.

Avoidance of cats is strongly recommended. If cats cannot be avoided, allergen-specific immunotherapy can be prescribed. Treatment for symptoms includes anti-histamines as well as corticosteroid tablets and sprays.

#### **Mites and Cockroaches**

#### House dust mites

You have a sensitization to house dust mites.

Associated allergic symptoms range from hay fever (allergic rhinoconjunctivitis) to asthma.

Der p 1 & Der f 1 are members of the Cystein Protease allergen family (CP). The potential for cross-reactions between different members of the CP family in different house dust mites is high. Allergen-specific immunotherapy is possible for sensitizations to major allergens Der p 1 and Der f 1, if corresponding clinical symptoms occur. 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 potential for cross-reactions between different members of the NPC2 is very high in different house dust mites, and less so to related allergens in storage mites. Allergen-specific immunotherapy is possible for sensitizations to major allergens Der p 2 and Der f 2, if corresponding clinical symptoms occur. Positive results were obtained for: Der f 2, Der p 2.

Der p 23 is a member of the Peritrophin-like Protein allergen family (PLP), which is associated with the development of asthma.

The potential for cross-reactions to other allergens of the PLP family is not clear.

Avoidance of house dust mites is advised. Dust mite proof encasings for blankets, mattresses, and pillows can reduce the allergen load. Treatment for symptoms includes anti-histamines as well as corticosteroid tablets and sprays. Allergen-specific immunotherapy is possible for sensitizations to major allergens Der f 1/Der p 1 and Der f 2/Der p 2, if corresponding clinical symptoms occur.

#### **Insect Venoms**

#### Wasp

You have a sensitization to wasp venom.

Associated allergic symptoms range from local to severe anaphylactic reactions.

Ves v 5 is a member of the Antigen 5 allergen family.

The potential for cross-reactions between Ves v 5 and other allergens of the Antigen 5 family is high to other vespula (common wasp) species and lower to dolichovespula (yellow jackets) and vespa (hornets) species.

Allergen-specific immunotherapy for Ves v 5 sensitization is possible, if corresponding clinical symptoms occur.

As avoidance of wasps is difficult, allergen-specific immunotherapy (AIT) is the major therapy option in wasp venom allergy. Additionally, emergency kits including adrenaline autoinjectors (EpiPen) are prescribed. Please consult your allergy specialist for further information and therapy options.















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 ALL ALLERGY TEST 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 ALL ALLERGY TEST RESULTS.

