| | | | |
|---|---|---|---|
| **Patient ID:** | 0000000000 | | **Referring Physician:** |
| **Patient Name:** | Фамилия И.О. | | |
| **Date of Birth:** | DD/MM/YYYY | | |
| **Sample ID:** | 0000000000 | | **Additional Information:** |
| **Barcode:** | 00AAA00A | | |
| **Assay performed on:** | DD/MM/YYYY | | |
| **Tested on:** | DD/MM/YYYY | | |
| **Approved on:** | DD/MM/YYYY | | |
| **Note: The internal QC (Plausibility check for GD) was within acceptance range.** | | | |

## Lab report: Summary on detectable sensitisations

| | | | | | |
|---|---|---|---|---|---|
| **Pollen** | Grass Pollen | 2 | | **Cross-reactive Allergen Families** | |
| | Tree Pollen | 1 | | Polcalcin | 0 |
| | Weed Pollen | 0 | | Profilin | 0 |
| **Mites** | House Dust Mites & Storage Mites | 0 | | PR-10 | 1 |
| **Microorganisms** | Fungal Spores & Yeast | 0 | | Ole e 1 Family | 0 |
| **Plant-Based Food** | Legumes | 0 | | LTPs | 0 |
| | Grain | 0 | | Storage Proteins | 0 |
| | Spices | 0 | | Lipocalins | 0 |
| | Fruits | 1 | | NPC2 | 0 |
| | Vegetables | 0 | | Serum albumin | 0 |
| | Nuts & Seeds | 1 | | Parvalbumin | 0 |
| **Animal-Derived Food** | Milk | 0 | | Tropomyosin | 0 |
| | Egg | 0 | | CCD | 0 |
| | Fish & Seafood | 0 | | Uteroglobin | 0 |
| | Meat | 0 | | Arginine kinase | 0 |
| **Insects & Venoms** | Ant, Bee, Wasp | 0 | | | |
| | Cockroach | 0 | | **Total IgE (kU/L)** | **≤ 20** |
| **Epithelial Tissues of Animals** | Pets | 0 | | | |
| | Animals | 0 | | | |
| **Others** | Latex | 0 | | | |
| | Ficus & Hops | 0 | | | |
| | CCD | 0 | | | |
| | Parasite | 0 | | | |

| **Highest measured IgE concentration per allergen group** | | | | |
|---|---|---|---|---|
| < 0,3 $kU_A/L$ | 0,3 - 1 $kU_A/L$ | 1 - 5 $kU_A/L$ | 5 - 15 $kU_A/L$ | > 15 $kU_A/L$ |
| 0 | 1 | 2 | 3 | 4 |
| Negative or uncertain | Low IgE level | Moderate IgE level | High IgE level | Very high IgE level |

| Name | Allergen | E/M(*) | Function | kU$_A$/L |
|---|---|---|---|---|
| **Pollen** | | | | |
| **Grass Pollen** | | | | |
| Bermuda grass | Cyn d | E | | ≤ 0,1 |
| Bermuda grass | Cyn d 1 | M | Beta-Expansin | ≤ 0,1 |
| Perennial Ryegrass | Lol p 1 | M | Beta-Expansin | 1,06 |
| Bahia grass | Pas n | E | | ≤ 0,1 |
| Timothy grass | Phl p 1 | M | Beta-Expansin | 2,08 |
| Timothy grass | Phl p 2 | M | Expansin | ≤ 0,1 |
| Timothy grass | Phl p 5.0101 | M | Grass Group 5/6 | 4,25 |
| Timothy grass | Phl p 6 | M | Grass Group 5/6 | 1,17 |
| Timothy grass | Phl p 7 | M | Polcalcin | ≤ 0,1 |
| Timothy grass | Phl p 12 | M | Profilin | ≤ 0,1 |
| Common reed | Phr c | E | | 0,41 |
| Cultivated rye, Pollen | Sec c_pollen | E | | 0,2 |
| **Tree Pollen** | | | | |
| Acacia | Aca m | E | | ≤ 0,1 |
| Tree of Heaven | Ail a | E | | ≤ 0,1 |
| Alder | Aln g 1 | M | PR-10 | ≤ 0,1 |
| Alder | Aln g 4 | M | Polcalcin | ≤ 0,1 |
| Silver birch | Bet v 1 | M | PR-10 | 0,37 |
| Silver birch | Bet v 2 | M | Profilin | ≤ 0,1 |
| Silver birch | Bet v 6 | M | Isoflavon Reductase | ≤ 0,1 |
| Paper mulberry | Bro pa | E | | ≤ 0,1 |
| Hazel pollen | Cor a_pollen | E | | ≤ 0,1 |
| Hazel pollen | Cor a 1.0103 | M | PR-10 | 0,26 |
| Sugi | Cry j 1 | M | Pectate Lyase | ≤ 0,1 |
| Cypress | Cup a 1 | M | Pectate Lyase | ≤ 0,1 |
| Cypress | Cup s | E | | ≤ 0,1 |
| Beech | Fag s 1 | M | PR-10 | ≤ 0,1 |
| Ash | Fra e | E | | ≤ 0,1 |
| Ash | Fra e 1 | M | Ole e 1-Family | ≤ 0,1 |
| Walnut pollen | Jug r_pollen | E | | ≤ 0,1 |
| Mountain cedar | Jun a | E | | ≤ 0,1 |
| Mulberry | Mor r | E | | ≤ 0,1 |
| Olive | Ole e 1 | M | Ole e 1-Family | ≤ 0,1 |
| Olive | Ole e 9 | M | 1,3 β Glucanase | ≤ 0,1 |
| Date palm | Pho d 2 | M | Profilin | ≤ 0,1 |
| London plane tree | Pla a 1 | M | Plant Invertase | ≤ 0,1 |
| London plane tree | Pla a 2 | M | Polygalacturonase | ≤ 0,1 |
| London plane tree | Pla a 3 | M | nsLTP | ≤ 0,1 |
| Cottonwood | Pop n | E | | ≤ 0,1 |
| Elm | Ulm c | E | | ≤ 0,1 |
| **Weed Pollen** | | | | |
| Common Pigweed | Ama r | E | | ≤ 0,1 |
| Ragweed | Amb a | E | | ≤ 0,1 |
| Ragweed | Amb a 1 | M | Pectate Lyase | ≤ 0,1 |

| Name | Allergen | E/M(*) | Function | kU$_A$/L |
|---|---|---|---|---|
| Ragweed | Amb a 4 | M | Plant Defensin | ≤ 0,1 |
| Mugwort | Art v | E | | ≤ 0,1 |
| Mugwort | Art v 1 | M | Plant Defensin | ≤ 0,1 |
| Mugwort | Art v 3 | M | nsLTP | ≤ 0,1 |
| Hemp | Can s | E | | ≤ 0,1 |
| Hemp | Can s 3 | M | nsLTP | ≤ 0,1 |
| Lamb's quarter | Che a | E | | ≤ 0,1 |
| Lamb's quarter | Che a 1 | M | Ole e 1-Family | ≤ 0,1 |
| Annual mercury | Mer a 1 | M | Profilin | ≤ 0,1 |
| Wall pellitory | Par j | E | | 0,15 |
| Wall pellitory | Par j 2 | M | nsLTP | 0,21 |
| Ribwort | Pla l | E | | ≤ 0,1 |
| Ribwort | Pla l 1 | M | Ole e 1-Family | 0,23 |
| Russian thistle | Sal k | E | | ≤ 0,1 |
| Russian thistle | Sal k 1 | M | Pectin Methylesterase | ≤ 0,1 |
| Nettle | Urt d | E | | 0,28 |
| **Mites** | | | | |
| **House Dust Mite** | | | | |
| American house dust mite | Der f 1 | M | Cysteine protease | ≤ 0,1 |
| American house dust mite | Der f 2 | M | NPC2 Family | ≤ 0,1 |
| European house dust mite | Der p 1 | M | Cysteine protease | ≤ 0,1 |
| European house dust mite | Der p 2 | M | NPC2 Family | ≤ 0,1 |
| European house dust mite | Der p 5 | M | unknown | ≤ 0,1 |
| European house dust mite | Der p 7 | M | Mites, Group 7 | ≤ 0,1 |
| European house dust mite | Der p 10 | M | Tropomyosin | ≤ 0,1 |
| European house dust mite | Der p 11 | M | Myosin, heavy chain | ≤ 0,1 |
| European house dust mite | Der p 20 | M | Arginine kinase | ≤ 0,1 |
| European house dust mite | Der p 21 | M | unknown | ≤ 0,1 |
| European house dust mite | Der p 23 | M | Peritrophin-like protein domain | ≤ 0,1 |
| **Storage Mite** | | | | |
| Acarus siro | Aca s | E | | ≤ 0,1 |
| Blomia tropicalis | Blo t 5 | M | Mites, Group 5 | ≤ 0,1 |
| Blomia tropicalis | Blo t 10 | M | Tropomyosin | ≤ 0,1 |
| Blomia tropicalis | Blo t 21 | M | unknown | ≤ 0,1 |
| Glycyphagus domesticus | Gly d 2 | M | NPC2 Family | ≤ 0,1 |
| Lepidoglyphus destructor | Lep d 2 | M | NPC2 Family | ≤ 0,1 |
| Tyrophagus putrescentiae | Tyr p | E | | ≤ 0,1 |
| Tyrophagus putrescentiae | Tyr p 2 | M | NPC2 Family | ≤ 0,1 |
| **Microorganisms & Spores** | | | | |
| **Yeast** | | | | |
| Malassezia sympodialis | Mala s 5 | M | unknown | ≤ 0,1 |
| Malassezia sympodialis | Mala s 6 | M | Cyclophilin | ≤ 0,1 |
| Malassezia sympodialis | Mala s 11 | M | Mn Superoxid-Dismutase | ≤ 0,1 |
| Yeast | Sac c | E | | ≤ 0,1 |
| **Moulds** | | | | |

| Name | Allergen | E/M(*) | Function | kU$_A$/L |
|---|---|---|---|---|
| Alternaria alternata | Alt a 1 | M | Alt a 1-Family | ≤ 0,1 |
| Alternaria alternata | Alt a 6 | M | Enolase | ≤ 0,1 |
| Aspergillus fumigatus | Asp f 1 | M | Mitogillin Family | ≤ 0,1 |
| Aspergillus fumigatus | Asp f 3 | M | Peroxysomal Protein | ≤ 0,1 |
| Aspergillus fumigatus | Asp f 4 | M | unknown | ≤ 0,1 |
| Aspergillus fumigatus | Asp f 6 | M | Mn Superoxid-Dismutase | ≤ 0,1 |
| Cladosporium herbarum | Cla h | E | | ≤ 0,1 |
| Cladosporium herbarum | Cla h 8 | M | Short Chain Dehydrogenase | ≤ 0,1 |
| Penicilium chrysogenum | Pen ch | E | | ≤ 0,1 |
| **Plant Food** | | | | |
| **Legumes** | | | | |
| Peanut | Ara h 1 | M | 7/8S Globulin | ≤ 0,1 |
| Peanut | Ara h 2 | M | 2S Albumin | ≤ 0,1 |
| Peanut | Ara h 3 | M | 11S Globulin | ≤ 0,1 |
| Peanut | Ara h 6 | M | 2S Albumin | ≤ 0,1 |
| Peanut | Ara h 8 | M | PR-10 | ≤ 0,1 |
| Peanut | Ara h 9 | M | nsLTP | ≤ 0,1 |
| Peanut | Ara h 15 | M | Oleosin | ≤ 0,1 |
| Chickpea | Cic a | E | | ≤ 0,1 |
| Soy | Gly m 4 | M | PR-10 | ≤ 0,1 |
| Soy | Gly m 5 | M | 7/8S Globulin | ≤ 0,1 |
| Soy | Gly m 6 | M | 11S Globulin | ≤ 0,1 |
| Soy | Gly m 8 | M | 2S Albumin | ≤ 0,1 |
| Lentil | Len c | E | | ≤ 0,1 |
| White bean | Pha v | E | | ≤ 0,1 |
| Pea | Pis s | E | | ≤ 0,1 |
| **Cereals** | | | | |
| Oat | Ave s | E | | ≤ 0,1 |
| Quinoa | Che q | E | | ≤ 0,1 |
| Common buckwheat | Fag e | E | | ≤ 0,1 |
| Common buckwheat | Fag e 2 | M | 2S Albumin | ≤ 0,1 |
| Barley | Hor v | E | | ≤ 0,1 |
| Lupine seed | Lup a | E | | ≤ 0,1 |
| Rice | Ory s | E | | 0,11 |
| Millet | Pan m | E | | ≤ 0,1 |
| Cultivated rye | Sec c_flour | E | | ≤ 0,1 |
| Wheat | Tri a aA_TI | M | Alpha-Amylase Trypsin-Inhibitor | ≤ 0,1 |
| Wheat | Tri a 14 | M | nsLTP | ≤ 0,1 |
| Wheat | Tri a 19 | M | Omega-5-Gliadin | ≤ 0,1 |
| Spelt | Tri s | E | | ≤ 0,1 |
| Maize | Zea m | E | | ≤ 0,1 |
| Maize | Zea m 14 | M | nsLTP | ≤ 0,1 |
| **Spices** | | | | |
| Paprika | Cap a | E | | ≤ 0,1 |
| Caraway | Car c | E | | ≤ 0,1 |
| Oregano | Ori v | E | | ≤ 0,1 |

| Name | Allergen | E/M(*) | Function | kU$_A$/L |
|---|---|---|---|---|
| Parsley | Pet c | E | | ≤ 0,1 |
| Anise | Pim a | E | | 0,19 |
| Mustard | Sin | E | | ≤ 0,1 |
| Mustard | Sin a 1 | M | 2S Albumin | ≤ 0,1 |
| **Fruit** | | | | |
| Kiwi | Act d 1 | M | Cysteine protease | ≤ 0,1 |
| Kiwi | Act d 2 | M | TLP | ≤ 0,1 |
| Kiwi | Act d 5 | M | Kiwellin | ≤ 0,1 |
| Kiwi | Act d 10 | M | nsLTP | ≤ 0,1 |
| Papaya | Car p | E | | ≤ 0,1 |
| Orange | Cit s | E | | ≤ 0,1 |
| Melon | Cuc m 2 | M | Profilin | ≤ 0,1 |
| Fig | Fic c | E | | ≤ 0,1 |
| Strawberry | Fra a 1+3 | M | PR-10+LTP | 0,43 |
| Apple | Mal d 1 | M | PR-10 | ≤ 0,1 |
| Apple | Mal d 2 | M | TLP | ≤ 0,1 |
| Apple | Mal d 3 | M | nsLTP | ≤ 0,1 |
| Mango | Man i | E | | ≤ 0,1 |
| Banana | Mus a | E | | ≤ 0,1 |
| Avocado | Pers a | E | | 0,2 |
| Cherry | Pru av | E | | ≤ 0,1 |
| Peach | Pru p 3 | M | nsLTP | ≤ 0,1 |
| Pear | Pyr c | E | | ≤ 0,1 |
| Blueberry | Vac m | E | | 0,2 |
| Grapes | Vit v 1 | M | nsLTP | ≤ 0,1 |
| **Vegetables** | | | | |
| Onion | All c | E | | ≤ 0,1 |
| Garlic | All s | E | | ≤ 0,1 |
| Celery | Api g 1 | M | PR-10 | ≤ 0,1 |
| Celery | Api g 2 | M | nsLTP | ≤ 0,1 |
| Celery | Api g 6 | M | nsLTP | ≤ 0,1 |
| Carrot | Dau c | E | | ≤ 0,1 |
| Carrot | Dau c 1 | M | PR-10 | ≤ 0,1 |
| Potato | Sol t | E | | ≤ 0,1 |
| Tomato | Sola l | E | | ≤ 0,1 |
| Tomato | Sola l 6 | M | nsLTP | ≤ 0,1 |
| **Nuts** | | | | |
| Cashew | Ana o | E | | ≤ 0,1 |
| Cashew | Ana o 2 | M | 11S Globulin | ≤ 0,1 |
| Cashew | Ana o 3 | M | 2S Albumin | ≤ 0,1 |
| Brazil nut | Ber e | E | | ≤ 0,1 |
| Brazil nut | Ber e 1 | M | 2S Albumin | ≤ 0,1 |
| Pecan | Car i | E | | ≤ 0,1 |
| Hazelnut | Cor a 1.0401 | M | PR-10 | 0,31 |
| Hazelnut | Cor a 8 | M | nsLTP | ≤ 0,1 |
| Hazelnut | Cor a 9 | M | 11S Globulin | ≤ 0,1 |
| Hazelnut | Cor a 11 | M | 7/8S Globulin | ≤ 0,1 |

| Name | Allergen | E/M(*) | Function | kU$_A$/L |
|---|---|---|---|---|
| Hazelnut | Cor a 14 | M | 2S Albumin | ≤ 0,1 |
| Walnut | Jug r 1 | M | 2S Albumin | ≤ 0,1 |
| Walnut | Jug r 2 | M | 7/8S Globulin | ≤ 0,1 |
| Walnut | Jug r 3 | M | nsLTP | ≤ 0,1 |
| Walnut | Jug r 4 | M | 11S Globulin | ≤ 0,1 |
| Walnut | Jug r 6 | M | 7/8S Globulin | ≤ 0,1 |
| Macadamia | Mac i 2S Albumin | M | 2S Albumin | ≤ 0,1 |
| Macadamia | Mac inte | E | | 0,15 |
| Pistachio | Pis v 1 | M | 2S Albumin | ≤ 0,1 |
| Pistachio | Pis v 2 | M | 11S Globulin subunit | ≤ 0,1 |
| Pistachio | Pis v 3 | M | 7/8S Globulin | ≤ 0,1 |
| Almond | Pru du | E | | ≤ 0,1 |
| **Seed** | | | | |
| Pumpkin seed | Cuc p | E | | ≤ 0,1 |
| Sunflower seed | Hel a | E | | ≤ 0,1 |
| Poppy seed | Pap s | E | | ≤ 0,1 |
| Poppy seed | Pap s 2S Albumin | M | 2S Albumin | ≤ 0,1 |
| Sesame | Ses i | E | | 0,29 |
| Sesame | Ses i 1 | M | 2S Albumin | 0,24 |
| Fenugreek seeds | Tri fo | E | | ≤ 0,1 |
| **Animal Food** | | | | |
| **Milk** | | | | |
| Cow, milk | Bos d_milk | E | | ≤ 0,1 |
| Cow, milk | Bos d 4 | M | α-Lactalbumin | ≤ 0,1 |
| Cow, milk | Bos d 5 | M | β-Lactoglobulin | ≤ 0,1 |
| Cow, milk | Bos d 8 | M | Casein | ≤ 0,1 |
| Camel | Cam d | E | | ≤ 0,1 |
| Goat, milk | Cap h_milk | E | | ≤ 0,1 |
| Mare's milk | Equ c_milk | E | | ≤ 0,1 |
| Sheep, milk | Ovi a_milk | E | | ≤ 0,1 |
| **Egg** | | | | |
| Egg white | Gal d_white | E | | ≤ 0,1 |
| Egg yolk | Gal d_yolk | E | | ≤ 0,1 |
| Egg white | Gal d 1 | M | Ovomucoid | ≤ 0,1 |
| Egg white | Gal d 2 | M | Ovalbumin | ≤ 0,1 |
| Egg white | Gal d 3 | M | Ovotransferrin | ≤ 0,1 |
| Egg white | Gal d 4 | M | Lysozym C | ≤ 0,1 |
| Egg yolk | Gal d 5 | M | Serum Albumin | ≤ 0,1 |
| **Seafood** | | | | |
| Herring worm | Ani s 1 | M | Kunitz Serin Protease Inhibitor | ≤ 0,1 |
| Herring worm | Ani s 3 | M | Tropomyosin | ≤ 0,1 |
| Crab | Chi spp. | E | | ≤ 0,1 |
| Herring | Clu h | E | | ≤ 0,1 |
| Herring | Clu h 1 | M | β-Parvalbumin | ≤ 0,1 |
| Brown shrimp | Cra c 6 | M | Troponin C | ≤ 0,1 |
| Carp | Cyp c 1 | M | β-Parvalbumin | ≤ 0,1 |

| Name | Allergen | E/M(*) | Function | kU$_A$/L |
|---|---|---|---|---|
| Atlantic cod | Gad m | E | | ≤ 0,1 |
| Atlantic cod | Gad m 2+3 | M | β-Enolase & Aldolase | ≤ 0,1 |
| Atlantic cod | Gad m 1 | M | β-Parvalbumin | ≤ 0,1 |
| Lobster | Hom g | E | | ≤ 0,1 |
| Shrimp | Lit s | E | | ≤ 0,1 |
| Squid | Lol spp. | E | | ≤ 0,1 |
| Common mussel | Myt e | E | | ≤ 0,1 |
| Oyster | Ost e | E | | ≤ 0,1 |
| Shrimp | Pan b | E | | ≤ 0,1 |
| Scallop | Pec spp. | E | | ≤ 0,1 |
| Black Tiger Shrimp | Pen m 1 | M | Tropomyosin | ≤ 0,1 |
| Black Tiger Shrimp | Pen m 2 | M | Arginine kinase | ≤ 0,1 |
| Black Tiger Shrimp | Pen m 3 | M | Myosin, light chain | ≤ 0,1 |
| Black Tiger Shrimp | Pen m 4 | M | Sarcoplasmic Calcium Binding Protein | ≤ 0,1 |
| Thornback ray | Raj c | E | | ≤ 0,1 |
| Thornback ray | Raj c Parvalbumin | M | α-Parvalbumin | ≤ 0,1 |
| Clam | Rud spp. | E | | ≤ 0,1 |
| Salmon | Sal s | E | | ≤ 0,1 |
| Salmon | Sal s 1 | M | β-Parvalbumin | ≤ 0,1 |
| Atlantic mackerel | Sco s | E | | ≤ 0,1 |
| Atlantic mackerel | Sco s 1 | M | β-Parvalbumin | ≤ 0,1 |
| Tuna | Thu a | E | | ≤ 0,1 |
| Tuna | Thu a 1 | M | β-Parvalbumin | ≤ 0,1 |
| Swordfish | Xip g 1 | M | β-Parvalbumin | ≤ 0,1 |
| **Meat** | | | | |
| House cricket | Ach d | E | | ≤ 0,1 |
| Cattle, meat | Bos d_meat | E | | ≤ 0,1 |
| Cattle, meat | Bos d 6 | M | Serum Albumin | ≤ 0,1 |
| Horse, meat | Equ c_meat | E | | ≤ 0,1 |
| Chicken meat | Gal d_meat | E | | 0,13 |
| Migratory locust | Loc m | E | | ≤ 0,1 |
| Turkey | Mel g | E | | ≤ 0,1 |
| Rabbit, meat | Ory_meat | E | | ≤ 0,1 |
| Sheep, meat | Ovi a_meat | E | | ≤ 0,1 |
| Pork | Sus d_meat | E | | ≤ 0,1 |
| Pork | Sus d 1 | M | Serum Albumin | ≤ 0,1 |
| Mealworm | Ten m | E | | 0,23 |
| **Insects & Venoms** | | | | |
| **Fire ant poison** | | | | |
| Fire ant | Sol spp. | E | | ≤ 0,1 |
| **Honey Bee Venom** | | | | |
| Honey bee | Api m | E | | ≤ 0,1 |
| Honey bee | Api m 1 | M | Phospholipase A2 | ≤ 0,1 |
| Honey bee | Api m 10 | M | Icarapin Variant 2 | ≤ 0,1 |
| **Wasp Venom** | | | | |
| Hornet | Dol spp | E | | ≤ 0,1 |

| Name | Allergen | E/M(*) | Function | kU$_A$/L |
|---|---|---|---|---|
| Paper wasp venom | Pol d | E | | ≤ 0,1 |
| Paper wasp venom | Pol d 5 | M | Antigen 5 | ≤ 0,1 |
| Wasp venom | Ves v | E | | ≤ 0,1 |
| Wasp venom | Ves v 1 | M | Phospholipase A1 | ≤ 0,1 |
| Wasp venom | Ves v 5 | M | Antigen 5 | ≤ 0,1 |
| **Cockroach** | | | | |
| German Cockroach | Bla g 1 | M | Cockroach Group 1 | ≤ 0,1 |
| German Cockroach | Bla g 2 | M | Aspartyl protease | ≤ 0,1 |
| German Cockroach | Bla g 4 | M | Lipocalin | ≤ 0,1 |
| German Cockroach | Bla g 5 | M | Glutathione S-transferase | ≤ 0,1 |
| German Cockroach | Bla g 9 | M | Arginine kinase | ≤ 0,1 |
| American Cockroach | Per a | E | | ≤ 0,1 |
| American Cockroach | Per a 7 | M | Tropomyosin | ≤ 0,1 |
| **Animal Origin** | | | | |
| **Pet** | | | | |
| Dog | Can f_Fd1 | M | Uteroglobin | ≤ 0,1 |
| Male dog urine (incl. Can f 5) | Can f_male urine | E | | ≤ 0,1 |
| Dog | Can f 1 | M | Lipocalin | ≤ 0,1 |
| Dog | Can f 2 | M | Lipocalin | ≤ 0,1 |
| Dog | Can f 3 | M | Serum Albumin | ≤ 0,1 |
| Dog | Can f 4 | M | Lipocalin | ≤ 0,1 |
| Dog | Can f 6 | M | Lipocalin | ≤ 0,1 |
| Guinea pig | Cav p 1 | M | Lipocalin | ≤ 0,1 |
| Cat | Fel d 1 | M | Uteroglobin | ≤ 0,1 |
| Cat | Fel d 2 | M | Serum Albumin | ≤ 0,1 |
| Cat | Fel d 4 | M | Lipocalin | ≤ 0,1 |
| Cat | Fel d 7 | M | Lipocalin | ≤ 0,1 |
| House mouse | Mus m 1 | M | Lipocalin | ≤ 0,1 |
| Rabbit, epithel | Ory c 1 | M | Lipocalin | ≤ 0,1 |
| Rabbit, epithel | Ory c 2 | M | Lipophilin | ≤ 0,1 |
| Rabbit, epithel | Ory c 3 | M | Uteroglobin | ≤ 0,1 |
| Djungarian hamster | Phod s 1 | M | Lipocalin | ≤ 0,1 |
| Rat | Rat n | E | | ≤ 0,1 |
| **Farm Animals** | | | | |
| Cattle | Bos d 2 | M | Lipocalin | ≤ 0,1 |
| Goat, epithel | Cap h_epithelia | E | | ≤ 0,1 |
| Horse, epithel | Equ c 1 | M | Lipocalin | ≤ 0,1 |
| Horse, epithel | Equ c 3 | M | Serum Albumin | ≤ 0,1 |
| Horse, epithel | Equ c 4 | M | Latherin | ≤ 0,1 |
| Sheep, epithel | Ovi a_epithelia | E | | ≤ 0,1 |
| Pig | Sus d_epithelia | E | | ≤ 0,1 |
| **Others** | | | | |
| **Latex** | | | | |
| Latex | Hev b 1 | M | Rubber elongation factor | ≤ 0,1 |
| Latex | Hev b 3 | M | Small rubber particle protein | 0,14 |

| Name | Allergen | E/M(*) | Function | kU$_A$/L |
|---|---|---|---|---|
| Latex | Hev b 5 | M | unknown | ≤ 0,1 |
| Latex | Hev b 6.02 | M | Pro-Hevein | ≤ 0,1 |
| Latex | Hev b 8 | M | Profilin | ≤ 0,1 |
| Latex | Hev b 11 | M | Class 1 Chitinase | ≤ 0,1 |
| **Ficus** | | | | |
| Weeping fig | Fic b | E | | ≤ 0,1 |
| **Ccd** | | | | |
| Hom s Lactoferrin | Hom s LF | M | CCD | ≤ 0,1 |
| **Parasite** | | | | |
| Pigeon tick | Arg r 1 | M | Lipocalin | ≤ 0,1 |

| Normal Total-IgE | |
|---|---|
| **Adults:** | < 20 kU/l Allergy unlikely, 20 - 100 kU/l Allergy possible, > 100 kU/l Allergy likely |

### PR-10

PR-10 allergens show a high degree of cross-reactivity.

PR-10 inhalative:
The major birch pollen allergen, Bet v 1, represents the prototype of all PR-10 allergens and is the primary sensitizer in regions with birch pollen exposure. The presence of PR-10 allergens in Fagales tree pollen explains IgE cross-reactivity between pollen from hazel, alder, beech, oak and hornbeam.
PR-10 nutritive:
PR-10 allergens in raw fruits, nuts, vegetable and legumes can induce oral allergy syndrome and sometimes severe allergic reactions in sensitized individuals, if a high amount of the respective allergen is consumed. PR-10 allergens are not stable to processing.

| Name | Allergen | E/M(*) | Function | kU$_A$/L |
|---|---|---|---|---|
| Alder | Aln g 1 | M | PR-10 | ≤ 0,1 |
| Apple | Mal d 1 | M | PR-10 | ≤ 0,1 |
| Beech | Fag s 1 | M | PR-10 | ≤ 0,1 |
| Carrot | Dau c 1 | M | PR-10 | ≤ 0,1 |
| Celery | Api g 1 | M | PR-10 | ≤ 0,1 |
| Hazel pollen | Cor a 1.0103 | M | PR-10 | 0,26 |
| Hazelnut | Cor a 1.0401 | M | PR-10 | 0,31 |
| Peanut | Ara h 8 | M | PR-10 | ≤ 0,1 |
| Silver birch | Bet v 1 | M | PR-10 | 0,37 |
| Soy | Gly m 4 | M | PR-10 | ≤ 0,1 |

## Interpretation - Support

### Raven Interpretation Summary

**Sample Information**

The sample was tested on ALEX² Barcode 00AAA00A, interpretation date MM/DD/YYYY.
Of the tested 295 allergens, 8 were/was above the cut off of 0.3 kU$_A$/L. A sensitisation can be an indicator of an IgE dependent allergy.
For all positive ALEX 2 allergens, comments for interpretation guidance are listed below.

**Total IgE: ≤20 kU/L**

The measured total IgE was below 20 kU/L, therefore allergy is unlikely

**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:

PR-10s: Bet v 1, Cor a 1.0401

**PR-10 Proteins**

PR-10 inhalative: The major birch pollen allergen, Bet v 1, represents the prototype of all PR-10 allergens and is the primary sensitiser in regions with birch-pollen exposure. The presence of PR-10 allergens in birch related tree pollen explains possible IgE cross-reactivity between pollen from hazel, alder, beech, oak and hornbeam. PR-10 nutritive: PR-10 allergens in fresh fruits, nuts, vegetables and legumes can induce oral allergy syndrome and sometimes even severe allergic reactions in sensitised individuals. PR-10 allergens are not stable to heat and digestion.

**Tree Pollen**

**Birch Family**

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

Bet v 1 is the major allergen in birch pollen and a member of the PR-10 allergen family. It is associated with inhalative symptoms and mostly mild forms of food allergy (e.g. oral allergy syndrome). The degree of cross-reactivity between Bet v 1 and pollen- as well as food-allergens from the PR-10 allergen family is high. The importance of these cross-reactions has to be analysed on a clinical level. Bet v 1 serves as a marker for AIT indication, if corresponding clinical symptoms are present.

Causal treatment is possible via AIT, symptomatic treatment includes anti-histamines and local corticosteroids in various formulations (tablet, spray).

**Grass pollen**

Sensitisation to grass pollen was detected. Allergic symptoms associated with grass pollen range from allergic rhinoconjunctivitis to allergic asthma.

Cyn d 1, Lol p 1 and Phl p 1 are members fo the β-Expansin allergen family. The degree of cross-reactivity between members of this allergen family is very high. β-Expansins serve as markers for AIT indication, if corresponding clinical symptoms are present. Positive results were obtained for: Lol p 1, Phl p 1.

Phl p 5 is a member of the Grass Group 5/6 allergen family. The degree of cross-reactivity between members of this allergen family is high, although not in all grass pollen species a Grass Group 5/6 allergen has been described. Along with Phl p 1 and Phl p 2, Phl p 5 serves as marker of true grass-pollen sensitisation. Phl p 1 and 5 serve as markers for AIT indication, if corresponding clinical symptoms are present.

Phl p 6 is a member of the Grass Group 5/6 allergen family. The degree of cross-reactivity between members of this allergen family is high.

Causal treatment is possible via AIT - Phl p 1 and 5 serve as markers for AIT indication, if corresponding are present. Symptomatic treatment includes anti-histamines and local corticosteroids in various formulations (tablet, spray).

**Fruits**

**Strawberry**

Sensitisation to strawberry was detected. Allergic symptoms associated with strawberry are usually mild, systemic reactions are rare.

Fra a 1 is a member of the PR-10 allergen family and is associated with mild forms of strawberry allergy (e.g. oral allergy syndrome). The degree of cross-reactivity between Fra a 1 and other members of the PR-10 allergen family is high. The importance of these cross-reactions has to be analysed on a clinical level. Usually Fra a 1 sensitisation is caused by a primary sensitisation against Bet v 1 from birch pollen. Fra a 1 is not stable towards heat and digestion. Fra a 3 is a member of the nsLTP allergen family and may cause clinical reactions from oral allergy syndrome to anaphylaxis. The degree of cross-reactivity between Fra a 3 and other members of the nsLTP family is high within botanically closely related species (e.g. stone fruit). The importance of these cross-reactions has to be analysed on a clinical level. Fra a 3 is stable towards heat and digestion.

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

**Nuts and Legumes**

**Hazelnut**

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

Cor a 1.0401 is a member of the PR-10 allergen family and is associated with mild forms of hazelnut allergy e.g. oral allergy syndrome. In rare cases, mild systemic reactions occur. Severe anaphylactic reactions are very rare. The degree of cross-reactivity between Cor a 1.0401 and other members of the PR-10 allergen family is high. The importance of these cross-reactions has to be analysed on a clinical level. In most cases a Cor a 1.0401 sensitisation is caused by a primary sensitisation against Bet v 1 from birch pollen. Cor a 1.0401 is not 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).

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 2 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 ALEX2

RESULTS.