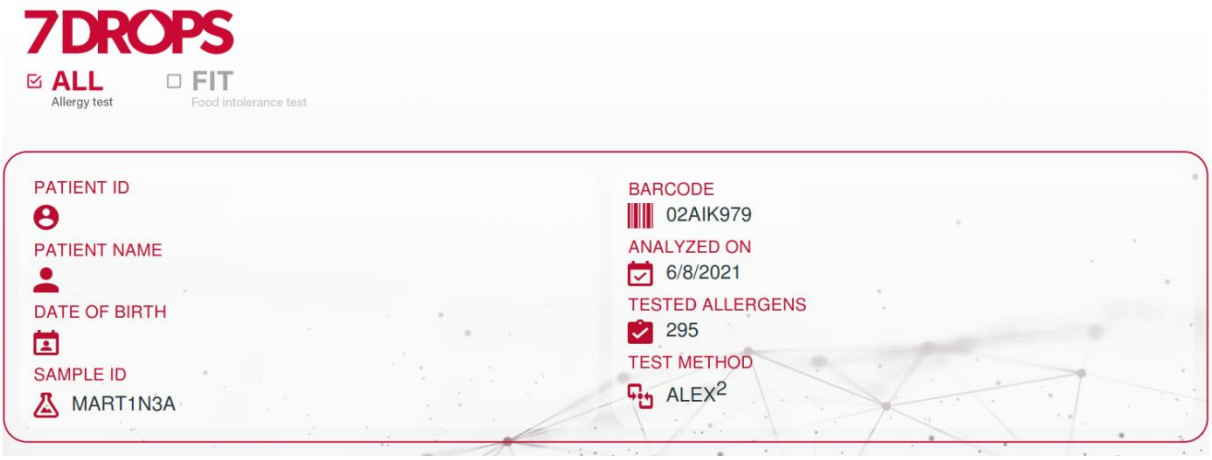
How to read your ALL lab report

ALL allergy test

Your lab report will be divided into four parts. This guide is here to help you navigate and understand your ALL allergy test results.

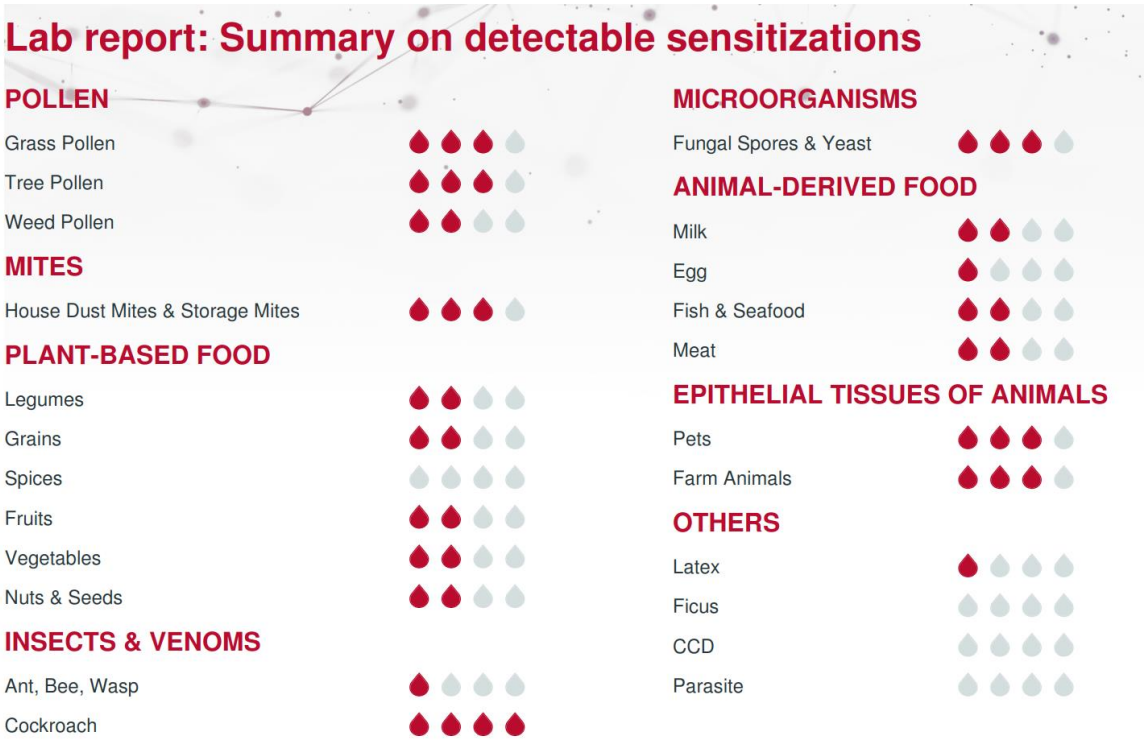
Part 1 – Patient info

When you register your 7DROPS kit on the online platform, your sample will automatically be connected to your patient ID.

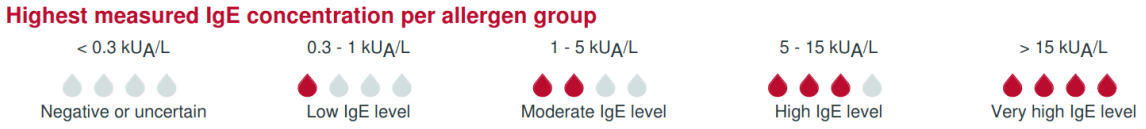


Part 1 of your lab report is a summary of your patient info, consisting of the following categories: patient ID, patient name, date of birth, sample ID, requisition code, barcode, date of analysis, number of tested allergens, and the test method.

Part 2 – Summary on detectable sensitization



Your ALL lab report begins with a summary of detectable sensitivities based on your blood sample.
This summary is divided into 8 allergen groups: pollen, mites, plant-based food, insect & venoms, microorganisms, animal-derived food, epithelial tissues of animals, and others.



For the analysis of your sample, the IgE antibody concentration is measured for every allergen group. Depending on how high the IgE concentration for a specific allergen is, the more likely your body will react with an allergic reaction when you encounter this specific allergen.

What the different levels of concentration mean for you:

< 0.3 kU_A/L (negative or uncertain) → no reactivity to allergen (no drops)
0.3 – 1kU_A/L (low IgE-level) → mild reactivity to allergen (one red drop)
1 – 5 kU_A/L (moderate IgE-level) → moderate reactivity to allergen (two red drops)
5 – 15 kU_A/L (high IgE-level) → high reactivity to allergen (three red drops)
> 15 kU_A/L (very high IgE-level) → very high reactivity to allergen (four red drops)

kU_A/L stand for kilounit per liter.

Part 3 – Detailed report

Name	E/M	Allergen	Protein Family	kU$_A$/L
POLLEN				
Grass Pollen				
Bermuda grass		Cyn d		2.42
		Cyn d 1	Beta-Expansin	2.64
Perennial Ryegrass		Lol p 1	Beta-Expansin	3.69
Bahia grass		Pas n		3.58
Timothy grass		Phl p 1	Beta-Expansin	5.15
		Phl p 2	Expansin	0.91
		Phl p 5.0101	Grass Group 5/6	3.73
		Phl p 6	Grass Group 5/6	0.70
		Phl p 7	Polcalcin	8.06
		Phl p 12	Profilin	≤ 0.10
Common reed		Phr c		0.27
Cultivated rye, Pollen		Sec c_pollen		1.09

The detailed report shows the IgE antibody concentration for every allergen within the respective allergen group and follows the same measuring system as the lab report summary (from low IgE level/no reactivity to allergen, to very high IgE level/ very high reactivity to allergen).

From left to right, you will see the allergen name (e.g., Bermuda grass), the type of allergen (e.g., allergen extract or molecular allergen), the scientific allergen name (e.g., Cyn d), the function of the allergen (e.g., Beta-Expansin), the measured IgE concentration in KU/L (e.g., 4.79).

Total IgE: 1506 kU/L

Normal Total-IgE

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

PRINTED ON
11/4/2021

ASSAY PERFORMED ON
6/8/2021

APPROVED ON
10/18/2021

Below the detailed report for every separate allergen, your total IgE concentration and the date of sampling, analysis (assay), printing, and approval of your sample will be stated.

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Number of tested allergen sources: 165

GRASS POLLEN 6
Bahia grass, Bermuda grass, Common reed, Perennial ryegrass, Rye, Timothy grass

TREE POLLEN 19
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

WEED POLLEN 10
Annual mercury, Hemp, Lamb's quarter, Mugwort, Nettle, Pigweed, Ragweed, Ribwort, Russian thistle, Wall pellitory

HOUSE DUST MITES & STORAGE MITES 7
Acarus siro, American house dust mite, Blomia tropicalis, European house dust mite, Glycyphagus domesticus, Lepidoglyphus destructor, Tyrophagus putrescentiae

LEGUMES 6
Chickpea, White bean, Lentil, Pea, Peanut, Soy

GRAINS 11
Barley, Buckwheat, Corn, Cultivated rye, Lupine, Millet, Oat, Quinoa, Rice, Spelt, Wheat

SPICES 6
Anise, Caraway, Mustard, Oregano, Paprika, Parsley

FRUITS 15
Avocado, Apple, Banana, Blueberry, Cherry, Fig, Grape, Kiwi, Mango, Muskmelon, Orange, Papaya, Peach, Pear, Strawberry

VEGETABLES 6
Carrot, Celery, Garlic, Onion, Potato, Tomato

NUTS & SEEDS 13
Almond, Brazil nut, Cashew, Hazelnut, Macadamia, Pecan, Pistachio, Walnut, Fenugreek seeds, Poppy seed, Pumpkin seed, Sesame, Sunflower seed

COCKROACH 2
American cockroach, German cockroach

INSECT VENOMS 5
Common wasp venom, Fire ant venom, Honeybee venom, Long-headed wasp venom, Paper wasp venom

FUNGAL SPORES & YEAST 6
Alternaria alternata, Aspergillus fumigatus, Baker's yeast, Cladosporium herbarum, Malassezia sympodialis, Penicilium chrysogenum

MILK 5
Camel's milk, Cow's milk, Goat's milk, Mare's milk, Sheep's milk

EGG 2
Egg white, Egg yolk

FISH & SEAFOOD 20
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

MEAT 10
Beef, Chicken, Horse, House cricket, Lamb, Mealworm, Migratory locust, Pig, Rabbit, Turkey

PETS 7
Cat, Djungarian hamster, Dog, Guinea pig, Mouse, Rabbit, Rat

FARM ANIMALS 5
Cattle, Goat, Horse, Pig, Sheep

OTHERS 4
Latex, Hom s lactoferrin, Pigeon tick, Weeping fig

The very last part of the detailed report states the number of allergen sources tested (e.g., 165) and shows how these allergens were split into different allergen groups (e.g., Egg [2]).

Part 4 – Interpretation summary

Interpretation - Support

Raven Interpretation Summary

Sample Information

The sample was tested on ALL Barcode 02AIK979, interpretation date 11/4/2021.

Of the tested 295 allergens, 122 were/was above the cut off of 0.3 kU_A/L. A sensitization can be an indicator of an IgE dependent allergy. For all positive ALL Allergy Test allergens, comments for interpretation guidance are listed below.

Total IgE: 1506 kU/L

The measured total IgE was 1506 kU/L. A high total IgE titre indicates that allergy is likely.

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:

- PR-10s: Aln g 1, Ara h 8, Bet v 1, Cor a 1.0401, Fag s 1, Mal d 1
- nsLTPs: Act d 10, Api g 2, Ara h 9, Art v 3, Can s 3, Cor a 8, Jug r 3, Mal d 3, Pru p 3, Tri a 14, Vit v 1, Zea m 14
- Parvalbumins: Clu h 1, Cyp c 1, Gad m 1, Sal s 1, Sco s 1, Thu a 1, Xip g 1
- Cysteine Proteases: Der f 1, Der p 1
- Polcalcins: Aln g 4, Phl p 7
- Storage Proteins: Ana o 2, Ana o 3, Ara h 1, Ara h 2, Jug r 1, Jug r 2, Pis v 1
- Tropomyosins: Blo t 10, Der p 10, Per a 7
- Lipocalins: Can f 1, Can f 2, Can f 4, Can f 6, Equ c 1, Fel d 4, Fel d 7
- Arginine Kinases: Bla g 9, Der p 20, Pen m 2

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 sensitizer in regions with birch pollen exposure. The presence of PR-10 allergens in birch related tree pollen explains possible IgE cross-reactions 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 sensitized individuals. PR-10 allergens are not resistant towards heat and digestion.

Non-specific Lipid Transfer Proteins (nsLTP)

Members of the nsLTP allergen family can cause inhalative symptoms (nsLTP in pollen), as well as mild to severe forms of food allergy. nsLTPs are resistant towards heat and digestion. nsLTP allergens can be found in tree-and weed pollen, and in many plant foods as well as in latex.

The final part of your lab report is a personalized interpretation of your results, powered by our proprietary interpretation software RAVEN.

It gives detailed information about allergen families and distinct allergens within these families.

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Tree Pollen

Birch Family

You have a sensitization to pollen from the Birch family.

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

Aln g 1 is a member of the PR-10 allergen family.

Associated allergic symptoms range from inhalative symptoms to mostly mild forms of food allergy (e.g., oral allergy syndrome).

The potential for cross-reactions between Aln g 1 and other pollen and food allergens from the PR-10 family is high. Food sources containing PR-10 allergens include strawberries, hazelnuts, peanuts, soy, carrot, and celery.

If corresponding clinical symptoms occur, allergen-specific immunotherapy (AIT) is a possible treatment for sensitization to Aln g 1.

Aln g 4 is a member of the Polcalcin allergen family.

Associated allergic symptoms are inhalative symptoms.

The potential for cross-reactions between Aln g 4 and other allergens of the Polcalcin family is high.

Bet v 1 is the major allergen in birch pollen and a member of the PR-10 allergen family.

Associated allergic symptoms range from inhalative symptoms to mild forms of food allergy (oral allergy syndrome).

The potential of cross-reactions with other allergens from the PR-10 family is high. Food sources containing PR-10 allergens include strawberries, hazelnuts, peanuts, soy, carott, and celery.

If corresponding clinical symptoms occur, allergen-specific immunotherapy (AIT) is a possible treatment for sensitization to Bet v 1.

Fag s 1 is a member of the PR-10 allergen family and is associated with inhalative symptoms and mostly mild forms of food allergy (e.g. oral allergy syndrome).

The potential for cross-reactions between Fag s 1 and other allergens from the PR-10 family is high. Food sources containing PR-10 allergens include strawberries, hazelnuts, peanuts, soy, carrot, and celery.

Therapy options for symptoms caused by Birch pollen include anti-histamines and corticosteroid tablets and sprays. Causal treatment is possible via allergen-specific-immunotherapy (AIT). Please consult your allergy specialist for further information and therapy options.

This information includes pointers about associated allergic symptoms (e.g., allergic conjunctivitis, allergic asthma), if cross-reactivity can be expected, and what kind of therapeutic measures can be taken to ease symptoms (e.g., avoidance of allergen, antihistamines, AIT).