

SAMPLE INFORMATION

Sample ID:
Sampling date: 02.02.2021
Approval status: Approved
Print date: 02.02.2021
Calibration curve:

PATIENT INFORMATION

Patient ID:
Name:
Birth date:
ID/MR#:
Age: 32
Gender: F






ORDERING PHYSICIAN INFORMATION

Ordering physician:
Address: London Allergy & Immunology Centre Ltd




1. Summary of positive IgE results

Mainly species-specific aeroallergen components








Grass pollen

Bermuda grass	Cyn d 1	Grass group 1	3,9 ISU-E	
Timothy grass	Phl p 1	Grass group 1	13 ISU-E	
	Phl p 4	Berberine bridge enzyme	2,5 ISU-E	
	Phl p 5	Grass group 5	2,6 ISU-E	
	Phl p 6	Grass group 6	0,6 ISU-E	



Tree pollen

Birch	Bet v 1	PR-10 protein	11 ISU-E	
Olive pollen	Ole e 1	Common olive group 1	1,3 ISU-E	
	Ole e 9	Beta-1,3-glucanase	0,8 ISU-E	

Animal






Dog	Can f 1	Lipocalin	13 ISU-E	
	Can f 2	Lipocalin	6,5 ISU-E	
	Can f 5	Arginine Esterase	26 ISU-E	
	Can f 6	Lipocalin	1,7 ISU-E	
Horse	Equ c 1	Lipocalin	3,6 ISU-E	
Cat	Fel d 1	Uteroglobin	7,8 ISU-E	
	Fel d 4	Lipocalin	0,6 ISU-E	

Mite




D. farinae (HDM)	Der f 2	NPC2 family	3,8 ISU-E	
D. pteronyssinus (HDM)	Der p 2	NPC2 family	2,1 ISU-E	

Cross-reactive components

PR-10 protein

Birch	Bet v 1	PR-10 protein	11 ISU-E	
Alder	Aln g 1	PR-10 protein	1,3 ISU-E	
Hazelnut	Cor a 1.0401	PR-10 protein	1,9 ISU-E	
Apple	Mal d 1	PR-10 protein	2,5 ISU-E	
Kiwi	Act d 8	PR-10 protein	2,2 ISU-E	

ISAC Standardized Units (ISU-E)

< 0.3	Undetectable	
0.3 - 0.9	Low	
1 - 14.9	Moderate / High	
≥ 15	Very High	

SAMPLE INFORMATION		PATIENT INFORMATION	
Sample ID:		Patient ID:	
Sampling date:	02.02.2021	Name:	
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2. IgE results sorted by protein group

The result comments are intended as an aid in the interpretation of test results and do not constitute medical advice. No liability is accepted in their use.

Mainly species-specific food components

Egg white	Gal d 1	Ovomucoid	<0.3 ISU-E
	Gal d 2	Ovalbumin	<0.3 ISU-E
	Gal d 3	Conalbumin/Ovotransferrin	<0.3 ISU-E
Egg yolk/chicken meat	Gal d 5	Livetin/Serum albumin	<0.3 ISU-E
Cow's milk	Bos d 4	Alpha-lactalbumin	<0.3 ISU-E
	Bos d 5	Beta-lactoglobulin	<0.3 ISU-E
	Bos d 8	Casein	<0.3 ISU-E
	Bos d lactoferrin	Transferrin	<0.3 ISU-E
Alpha-Gal	Alpha-Gal	Gal-alpha-1,3-Gal (Alpha-Gal)	<0.3 ISU-E
Cod	Gad c 1	Parvalbumin	<0.3 ISU-E
Shrimp	Pen m 2	Arginine kinase	<0.3 ISU-E
	Pen m 4	Sarcoplasmic calcium binding protein	<0.3 ISU-E
Cashew nut	Ana o 2	Storage protein, 11S globulin	<0.3 ISU-E
	Ana o 3	Storage protein, 2S albumin	<0.3 ISU-E
Brazil nut	Ber e 1	Storage protein, 2S albumin	<0.3 ISU-E
Hazelnut	Cor a 9	Storage protein, 11S globulin	<0.3 ISU-E
	Cor a 14	Storage protein, 2S albumin	<0.3 ISU-E
Walnut	Jug r 1	Storage protein, 2S albumin	<0.3 ISU-E
Sesame seed	Ses i 1	Storage protein, 2S albumin	<0.3 ISU-E
Peanut	Ara h 1	Storage protein, 7S globulin	<0.3 ISU-E
	Ara h 2	Storage protein, 2S albumin	<0.3 ISU-E
	Ara h 3	Storage protein, 11S globulin	<0.3 ISU-E
	Ara h 6	Storage protein, 2S albumin	<0.3 ISU-E
Soybean	Gly m 5	Storage protein, Beta-conglycinin	<0.3 ISU-E
	Gly m 6	Storage protein, Glycinin	<0.3 ISU-E
Buckwheat	Fag e 2	Storage protein, 2S albumin	<0.3 ISU-E
Wheat	Tri a 14	Lipid transfer protein (nsLTP)	<0.3 ISU-E
	Tri a 19.0101	Omega-5 gliadin	<0.3 ISU-E
	Tri a aA_TI	Alpha-amylase / Trypsin inhibitor	<0.3 ISU-E

Mainly species-specific food components

Kiwi	Act d 1	Cysteine protease	<0.3 ISU-E
	Act d 5	Kiwellin	<0.3 ISU-E




Parvalbumins are major allergens in fish and markers for cross-reactivity among different species of fish.

Mainly species-specific aeroallergen components

Grass pollen

Bermuda grass	Cyn d 1	Grass group 1	3,9 ISU-E	
Timothy grass	Phl p 1	Grass group 1	13 ISU-E	
	Phl p 2	Grass group 2	<0.3 ISU-E	
	Phl p 4	Berberine bridge enzyme	2,5 ISU-E	
	Phl p 5	Grass group 5	2,6 ISU-E	
	Phl p 6	Grass group 6	0,6 ISU-E	
	Phl p 11	Ole e 1-related protein	<0.3 ISU-E	

Tree pollen







Birch	Bet v 1	PR-10 protein	11 ISU-E	
Japanese cedar	Cry j 1	Pectate lyase	<0.3 ISU-E	
Cypress	Cup a 1	Pectate lyase	<0.3 ISU-E	
Olive pollen	Ole e 1	Common olive group 1	1,3 ISU-E	
	Ole e 9	Beta-1,3-glucanase	0,8 ISU-E	
Plane tree	Pla a 1	Putative invertase inhibitor	<0.3 ISU-E	

Ole e 1 is also a marker for ash sensitization.

Weed pollen

Ragweed	Amb a 1	Pectate lyase	<0.3 ISU-E
Mugwort	Art v 1	Defensin	<0.3 ISU-E
Goosefoot	Che a 1	Ole e 1-related protein	<0.3 ISU-E
Wall pelitory	Par j 2	Lipid transfer protein (nsLTP)	<0.3 ISU-E
Plantain	Pla l 1	Ole e 1-related protein	<0.3 ISU-E
Saltwort	Sal k 1	Pectin methylesterase	<0.3 ISU-E

Animal

Dog	Can f 1	Lipocalin	13 ISU-E	
	Can f 2	Lipocalin	6,5 ISU-E	
	Can f 4	Lipocalin	<0.3 ISU-E	
	Can f 5	Arginine Esterase	26 ISU-E	
	Can f 6	Lipocalin	1,7 ISU-E	
	Horse	Equ c 1	Lipocalin	3,6 ISU-E
Cat	Fel d 1	Uteroglobin	7,8 ISU-E	
	Fel d 4	Lipocalin	0,6 ISU-E	
Mouse	Mus m 1	Lipocalin	<0.3 ISU-E	

Mold



Alternaria	Alt a 1	Acidic glycoprotein	<0.3 ISU-E
	Alt a 6	Enolase	<0.3 ISU-E
Aspergillus	Asp f 1	Mitogillin family	<0.3 ISU-E
	Asp f 3	Peroxisomal protein	<0.3 ISU-E
	Asp f 6	Mn superoxide dismutase	<0.3 ISU-E
Cladosporium	Cla h 8	Mannitol dehydrogenase	<0.3 ISU-E

Mite

B. tropicalis (HDM)	Blo t 5	Mite group 5	<0.3 ISU-E
D. farinae (HDM)	Der f 1	Cysteine protease	<0.3 ISU-E

Mainly species-specific aeroallergen components

Mite

D. farinae (HDM)	Der f 2	NPC2 family	3,8 ISU-E	
D. pteronyssinus (HDM)	Der p 1	Cysteine protease	<0.3 ISU-E	
	Der p 2	NPC2 family	2,1 ISU-E	
	Der p 23	Peritrophin-like protein domain (PF01607)	<0.3 ISU-E	
L. destructor (storage mite)	Lep d 2	NPC2 family	<0.3 ISU-E	

Cockroach

Cockroach	Bla g 1	Cockroach group 1	<0.3 ISU-E
	Bla g 2	Aspartic protease	<0.3 ISU-E
	Bla g 5	Glutathione S-transferase	<0.3 ISU-E

Parasite

Anisakis	Ani s 1	Serine protease inhibitor	<0.3 ISU-E
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Latex

Latex	Hev b 1	Rubber elongation factor	<0.3 ISU-E
	Hev b 3	Small rubber particle protein	<0.3 ISU-E
	Hev b 5	Acidic protein	<0.3 ISU-E
	Hev b 6	Hevein	<0.3 ISU-E

Cross-reactive components

Serum albumin

Cow's milk/meat	Bos d 6	Serum albumin	<0.3 ISU-E
Dog	Can f 3	Serum albumin	<0.3 ISU-E
Horse	Equ c 3	Serum albumin	<0.3 ISU-E
Cat	Fel d 2	Serum albumin	<0.3 ISU-E

A protein present in different animal fluids and tissues, e.g blood, milk, meat (e.g. beef) and egg. Cross-reactions between albumins from different animal species are well known, for example between cat and dog or cat and pork.

Tropomyosin

Anisakis	Ani s 3	Tropomyosin	<0.3 ISU-E
Cockroach	Bla g 7	Tropomyosin	<0.3 ISU-E
D. pteronyssinus (HDM)	Der p 10	Tropomyosin	<0.3 ISU-E
Shrimp	Pen m 1	Tropomyosin	<0.3 ISU-E

An actin-binding protein in muscle fibers. A marker for cross-reactivity between crustaceans, mites and cockroaches.

Lipid transfer protein (nsLTP)






Peanut	Ara h 9	Lipid transfer protein (nsLTP)	<0.3 ISU-E
Hazelnut	Cor a 8	Lipid transfer protein (nsLTP)	<0.3 ISU-E
Walnut	Jug r 3	Lipid transfer protein (nsLTP)	<0.3 ISU-E
Peach	Pru p 3	Lipid transfer protein (nsLTP)	<0.3 ISU-E
Mugwort	Art v 3	Lipid transfer protein (nsLTP)	<0.3 ISU-E
Olive pollen	Ole e 7	Lipid transfer protein (nsLTP)	<0.3 ISU-E
Plane tree	Pla a 3	Lipid transfer protein (nsLTP)	<0.3 ISU-E

Cross-reactive components

Lipid transfer protein (nsLTP)

Sensitization to LTPs is often associated with allergic reactions to fruit and vegetables in regions where peaches and closely related fruits are cultivated and is associated with systemic reactions in addition to OAS. LTP proteins are stable to heat and digestion causing reactions also to cooked foods.

PR-10 protein

Birch	Bet v 1	PR-10 protein	11 ISU-E	
Alder	Aln g 1	PR-10 protein	1,3 ISU-E	
Hazel pollen	Cor a 1.0101	PR-10 protein	<0.3 ISU-E	
Hazelnut	Cor a 1.0401	PR-10 protein	1,9 ISU-E	
Apple	Mal d 1	PR-10 protein	2,5 ISU-E	
Peach	Pru p 1	PR-10 protein	<0.3 ISU-E	
Soybean	Gly m 4	PR-10 protein	<0.3 ISU-E	
Peanut	Ara h 8	PR-10 protein	<0.3 ISU-E	
Kiwi	Act d 8	PR-10 protein	2,2 ISU-E	
Celery	Api g 1	PR-10 protein	<0.3 ISU-E	

Birch or related Fagales tree pollens are often the primary sensitizer to PR-10 proteins in areas with high exposure to these pollens. The presence of PR-10 proteins in many plant foods can cause allergic reactions to fruits, nuts and vegetables due to cross-reactivity, and is often associated with local symptoms such as oral allergy syndrom (OAS). Many of these proteins are heat labile and cooked foods are often tolerated.

Thaumatine-like protein

Kiwi	Act d 2	Thaumatococcus-like protein	<0.3 ISU-E
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Act d 2 may cross-react with other thaumatococcus-like proteins.

Profilin

Birch	Bet v 2	Profilin	<0.3 ISU-E
Latex	Hev b 8	Profilin	<0.3 ISU-E
Annual mercury	Mer a 1	Profilin	<0.3 ISU-E
Timothy grass	Phl p 12	Profilin	<0.3 ISU-E

Profilins show great homology and cross-reactivity even between distantly related plant species. Seldom associated with clinical symptoms but may cause demonstrable or even severe reactions in a minority of patients allergic to e.g. citrus fruits, melon, banana, litchi and tomato.

CCD

CCD	MUXF3	CCD	<0.3 ISU-E
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Cross-reactive Carbohydrate Determinants (CCD) are rarely associated with allergic reactions, but may produce positive in-vitro test results to CCD-containing allergens from pollen, plant food, insects and venoms.

Polcalcin (Calcium binding 2-EF-hand protein)

Birch	Bet v 4	Polcalcin	<0.3 ISU-E
Timothy grass	Phl p 7	Polcalcin	<0.3 ISU-E

Markers for cross-reactivity between pollen.

ISAC Standardized Units (ISU-E)

< 0.3

0.3 - 0.9

1 - 14.9

≥ 15

Level

Undetectable

Low

Moderate / High

Very High



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Sampling date:	02.02.2021	Name:	
Approval status:		Birth date:	Age: 32
Print date:	02.02.2021	ID/MR#:	Gender: F
Calibration curve:			

ORDERING PHYSICIAN INFORMATION

Ordering physician:	
Address:	London Allergy & Immunology Centre Ltd



3. IgE results sorted by allergen source

Food allergens












Egg white	Gal d 1	Ovomucoid	<0.3 ISU-E
	Gal d 2	Ovalbumin	<0.3 ISU-E
	Gal d 3	Conalbumin/Ovotransferrin	<0.3 ISU-E
Egg yolk/chicken meat	Gal d 5	Livetin/Serum albumin	<0.3 ISU-E
Cow's milk	Bos d 4	Alpha-lactalbumin	<0.3 ISU-E
	Bos d 5	Beta-lactoglobulin	<0.3 ISU-E
Cow's milk/meat	Bos d 6	Serum albumin	<0.3 ISU-E
Cow's milk	Bos d 8	Casein	<0.3 ISU-E
	Bos d lactoferrin	Transferrin	<0.3 ISU-E
	Alpha-Gal	Gal-alpha-1,3-Gal (Alpha-Gal)	<0.3 ISU-E
Cod	Gad c 1	Parvalbumin	<0.3 ISU-E
Shrimp	Pen m 1	Tropomyosin	<0.3 ISU-E
	Pen m 2	Arginine kinase	<0.3 ISU-E
	Pen m 4	Sarcoplasmic calcium binding protein	<0.3 ISU-E
Cashew nut	Ana o 2	Storage protein, 11S globulin	<0.3 ISU-E
	Ana o 3	Storage protein, 2S albumin	<0.3 ISU-E
Brazil nut	Ber e 1	Storage protein, 2S albumin	<0.3 ISU-E
Hazelnut	Cor a 1.0401	PR-10 protein	1,9 ISU-E
	Cor a 8	Lipid transfer protein (nsLTP)	<0.3 ISU-E
	Cor a 9	Storage protein, 11S globulin	<0.3 ISU-E
	Cor a 14	Storage protein, 2S albumin	<0.3 ISU-E
Walnut	Jug r 1	Storage protein, 2S albumin	<0.3 ISU-E
	Jug r 3	Lipid transfer protein (nsLTP)	<0.3 ISU-E
Sesame seed	Ses i 1	Storage protein, 2S albumin	<0.3 ISU-E
Peanut	Ara h 1	Storage protein, 7S globulin	<0.3 ISU-E
	Ara h 2	Storage protein, 2S albumin	<0.3 ISU-E
	Ara h 3	Storage protein, 11S globulin	<0.3 ISU-E
	Ara h 6	Storage protein, 2S albumin	<0.3 ISU-E
	Ara h 8	PR-10 protein	<0.3 ISU-E
	Ara h 9	Lipid transfer protein (nsLTP)	<0.3 ISU-E
Soybean	Gly m 4	PR-10 protein	<0.3 ISU-E










Food allergens

Soybean	Gly m 5	Storage protein, Beta-conglycinin	<0.3 ISU-E	
	Gly m 6	Storage protein, Glycinin	<0.3 ISU-E	
Buckwheat	Fag e 2	Storage protein, 2S albumin	<0.3 ISU-E	
Wheat	Tri a 14	Lipid transfer protein (nsLTP)	<0.3 ISU-E	
	Tri a 19.0101	Omega-5 gliadin	<0.3 ISU-E	
	Tri a aA_TI	Alpha-amylase / Trypsin inhibitor	<0.3 ISU-E	
Kiwi	Act d 1	Cysteine protease	<0.3 ISU-E	
	Act d 2	Thaumatococcus-like protein	<0.3 ISU-E	
	Act d 5	Kiwellin	<0.3 ISU-E	
	Act d 8	PR-10 protein	2,2 ISU-E	
Apple	Mal d 1	PR-10 protein	2,5 ISU-E	
Peach	Pru p 1	PR-10 protein	<0.3 ISU-E	
	Pru p 3	Lipid transfer protein (nsLTP)	<0.3 ISU-E	
Celery	Api g 1	PR-10 protein	<0.3 ISU-E	

Aeroallergens

Bermuda grass	Cyn d 1	Grass group 1	3,9 ISU-E	
Timothy grass	Phl p 1	Grass group 1	13 ISU-E	
	Phl p 2	Grass group 2	<0.3 ISU-E	
	Phl p 4	Berberine bridge enzyme	2,5 ISU-E	
	Phl p 5	Grass group 5	2,6 ISU-E	
	Phl p 6	Grass group 6	0,6 ISU-E	
	Phl p 7	Polcalcin	<0.3 ISU-E	
	Phl p 11	Ole e 1-related protein	<0.3 ISU-E	
	Phl p 12	Profilin	<0.3 ISU-E	
Alder	Aln g 1	PR-10 protein	1,3 ISU-E	
Birch	Bet v 1	PR-10 protein	11 ISU-E	
	Bet v 2	Profilin	<0.3 ISU-E	
	Bet v 4	Polcalcin	<0.3 ISU-E	
Hazel pollen	Cor a 1.0101	PR-10 protein	<0.3 ISU-E	
Japanese cedar	Cry j 1	Pectate lyase	<0.3 ISU-E	
Cypress	Cup a 1	Pectate lyase	<0.3 ISU-E	
Olive pollen	Ole e 1	Common olive group 1	1,3 ISU-E	
	Ole e 7	Lipid transfer protein (nsLTP)	<0.3 ISU-E	
	Ole e 9	Beta-1,3-glucanase	0,8 ISU-E	
Plane tree	Pla a 1	Putative invertase inhibitor	<0.3 ISU-E	
	Pla a 3	Lipid transfer protein (nsLTP)	<0.3 ISU-E	
Ragweed	Amb a 1	Pectate lyase	<0.3 ISU-E	
Mugwort	Art v 1	Defensin	<0.3 ISU-E	
	Art v 3	Lipid transfer protein (nsLTP)	<0.3 ISU-E	
Goosefoot	Che a 1	Ole e 1-related protein	<0.3 ISU-E	
Annual mercury	Mer a 1	Profilin	<0.3 ISU-E	
Wall pelitory	Par j 2	Lipid transfer protein (nsLTP)	<0.3 ISU-E	
Plantain	Pla l 1	Ole e 1-related protein	<0.3 ISU-E	
Saltwort	Sal k 1	Pectin methylesterase	<0.3 ISU-E	
Dog	Can f 1	Lipocalin	13 ISU-E	
	Can f 2	Lipocalin	6,5 ISU-E	
	Can f 3	Serum albumin	<0.3 ISU-E	
	Can f 4	Lipocalin	<0.3 ISU-E	



Aeroallergens

Dog	Can f 5	Arginine Esterase	26 ISU-E	
	Can f 6	Lipocalin	1,7 ISU-E	
Horse	Equ c 1	Lipocalin	3,6 ISU-E	
	Equ c 3	Serum albumin	<0.3 ISU-E	
Cat	Fel d 1	Uteroglobin	7,8 ISU-E	
	Fel d 2	Serum albumin	<0.3 ISU-E	
	Fel d 4	Lipocalin	0,6 ISU-E	
Mouse	Mus m 1	Lipocalin	<0.3 ISU-E	
Alternaria	Alt a 1	Acidic glycoprotein	<0.3 ISU-E	
	Alt a 6	Enolase	<0.3 ISU-E	
Aspergillus	Asp f 1	Mitogillin family	<0.3 ISU-E	
	Asp f 3	Peroxisomal protein	<0.3 ISU-E	
	Asp f 6	Mn superoxide dismutase	<0.3 ISU-E	
Cladosporium	Cla h 8	Mannitol dehydrogenase	<0.3 ISU-E	
B. tropicalis (HDM)	Blo t 5	Mite group 5	<0.3 ISU-E	
D. farinae (HDM)	Der f 1	Cysteine protease	<0.3 ISU-E	
	Der f 2	NPC2 family	3,8 ISU-E	
D. pteronyssinus (HDM)	Der p 1	Cysteine protease	<0.3 ISU-E	
	Der p 2	NPC2 family	2,1 ISU-E	
	Der p 10	Tropomyosin	<0.3 ISU-E	
	Der p 23	Peritrophin-like protein domain (PF01607)	<0.3 ISU-E	
L. destructor (storage mite)	Lep d 2	NPC2 family	<0.3 ISU-E	
Cockroach	Bla g 1	Cockroach group 1	<0.3 ISU-E	
	Bla g 2	Aspartic protease	<0.3 ISU-E	
	Bla g 5	Glutathione S-transferase	<0.3 ISU-E	
	Bla g 7	Tropomyosin	<0.3 ISU-E	

Other

Anisakis	Ani s 1	Serine protease inhibitor	<0.3 ISU-E
	Ani s 3	Tropomyosin	<0.3 ISU-E
Latex	Hev b 1	Rubber elongation factor	<0.3 ISU-E
	Hev b 3	Small rubber particle protein	<0.3 ISU-E
	Hev b 5	Acidic protein	<0.3 ISU-E
	Hev b 6	Hevein	<0.3 ISU-E
	Hev b 8	Profilin	<0.3 ISU-E
CCD	MUXF3	CCD	<0.3 ISU-E

ISAC Standardized Units (ISU-E)

< 0.3	Undetectable	
0.3 - 0.9	Low	
1 - 14.9	Moderate / High	
≥ 15	Very High	