

SAMPLE INFORMATION

Sample ID: AB31527\_3:38 PM\_4  
 Sampling date: 20.03.2013  
 Approval status: Measured  
 Print date: 20.03.2013  
 Calibration curve: CTR02 2/20/2013  
 A9T0927\_1:21 PM\_4

PATIENT INFORMATION

Patient ID: 2761  
 Name:  
 Birth date:  
 ID/MR#:  
 Age: 5  
 Gender: M

ORDERING PHYSICIAN INFORMATION

Ordering physician:

## 1. Summary of positive IgE results

Mainly species-specific food components

Cow's milk حليب البقر	nBos d 4	Alpha-lactalbumin	1,8 ISU-E	
	nBos d 5	Beta-lactoglobulin	1,3 ISU-E	
	nBos d 8	Casein	0,4 ISU-E	

Cross-reactive components

Serum albumin

Cow's milk/meat حليب/لحم البقر	nBos d 6	Serum albumin	6,5 ISU-E	
Dog الكلب	nCan f 3	Serum albumin	1,3 ISU-E	
Horse الحصان	nEqu c 3	Serum albumin	0,8 ISU-E	
Cat القطة	nFel d 2	Serum albumin	2,8 ISU-E	

ISAC Standardized Units (ISU-E)

Level

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

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## 2. IgE results sorted by protein group

Mainly species-specific food components

Egg white-بيض	nGal d 1	Ovomucoid	<0,3 ISU-E	
	nGal d 2	Ovalbumin	<0,3 ISU-E	
	nGal d 3	Conalbumin/Ovotransferrin	<0,3 ISU-E	
Egg yolk/chicken meat-صفار البيض/لحm الدجاج	nGal d 5	Livetin/Serum albumin	<0,3 ISU-E	
Cow's milk-חלב البقر	nBos d 4	Alpha-lactalbumin	1,8 ISU-E	
	nBos d 5	Beta-lactoglobulin	1,3 ISU-E	
	nBos d 8	Casein	0,4 ISU-E	
	nBos d lactoferrin	Transferrin	<0,3 ISU-E	
Cod-القـد	rGad c 1	Parvalbumin	<0,3 ISU-E	
Shrimp-القربيـس	nPen m 2	Arginine kinase	<0,3 ISU-E	
	nPen m 4	Sarcoplasmic calcium binding protein	<0,3 ISU-E	
Cashew nut-الكاشـو	rAna o 2	Storage protein, 11S globulin	<0,3 ISU-E	
Brazil nut-جوزة الـاماـزـون	rBer e 1	Storage protein, 2S albumin	<0,3 ISU-E	
Hazelnut-الـبـنـدـق	nCor a 9	Storage protein, 11S globulin	<0,3 ISU-E	
Walnut-الـجـوـز	nJug r 1	Storage protein, 2S albumin	<0,3 ISU-E	
	nJug r 2	Storage protein, 7S globulin	<0,3 ISU-E	
Sesame seed-الـسـمـسـم	nSes i 1	Storage protein, 2S albumin	<0,3 ISU-E	
Peanut-الفـسـقـ السـوـدـانـي	rAra h 1	Storage protein, 7S globulin	<0,3 ISU-E	
	rAra h 2	Storage protein, Conglutin	<0,3 ISU-E	
	rAra h 3	Storage protein, 11S globulin	<0,3 ISU-E	
	nAra h 6	Storage protein, 2S albumin	<0,3 ISU-E	
Soybean-فـولـ الصـوـبـا	nGly m 5	Storage protein, Beta-conglycinin	<0,3 ISU-E	
	nGly m 6	Storage protein, Glycinin	<0,3 ISU-E	
Buckwheat-الـحـنـطـةـ السـوـدـاءـ	nFag e 2	Storage protein, 2S albumin	<0,3 ISU-E	
Wheat-الـقـمـح	rTri a 14	Lipid transfer protein (nsLTP)	<0,3 ISU-E	
	rTri a 19.0101	Omega-5 gliadin	<0,3 ISU-E	
	nTri a aA_TI	Alpha-amylase / Trypsin inhibitor	<0,3 ISU-E	
Kiwi-فاـكـهـةـ الـكـيـوـيـ	nAct d 1	Cysteine protease	<0,3 ISU-E	
	nAct 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

عشبة الاجيل- Bermuda grass	nCyn d 1	Grass group 1	<0,3 ISU-E
عصوية المروج- Timothy grass	rPhl p 1	Grass group 1	<0,3 ISU-E
	rPhl p 2	Grass group 2	<0,3 ISU-E
	nPhl p 4	Berberine bridge enzyme	<0,3 ISU-E
	rPhl p 5	Grass group 5	<0,3 ISU-E
	rPhl p 6	Grass group 6	<0,3 ISU-E
	rPhl p 11	Ole e 1-related protein	<0,3 ISU-E

### Tree pollen

شجرة القصبان- Birch	rBet v 1	PR-10 protein	<0,3 ISU-E
الأرز الياباني- Japanese cedar	nCry j 1	Pectate lyase	<0,3 ISU-E
شجرة الثرو- Cypress	nCup a 1	Pectate lyase	<0,3 ISU-E
شجرة الزيتون- Olive pollen	nOle e 1	Common olive group 5	<0,3 ISU-E
	rOle e 9	Beta-1,3-glucanase	<0,3 ISU-E
شجرة الدلب- Plane tree	rPla a 1	Putative invertase inhibitor	<0,3 ISU-E
	nPla a 2	Polygalacturonase	<0,3 ISU-E

Ole e 1 is also a marker for ash sensitization.

### Weed pollen

عشبة الرجيد- Ragweed	nAmb a 1	Pectate lyase	<0,3 ISU-E
الشيح- Mugwort	nArt v 1	Defensin	<0,3 ISU-E
الزربع/الرمام- Goosefoot	rChe a 1	Ole e 1-related protein	<0,3 ISU-E
عشبة القرفاز- Wall pelitory	rPar j 2	Lipid transfer protein (nsLTP)	<0,3 ISU-E
موز الجنة/نبات لسان الحمل- Plantain	rPla l 1	Ole e 1-related protein	<0,3 ISU-E
الحرض الشائكة- Saltwort	nSal k 1	Pectin methylesterase	<0,3 ISU-E

### Animal

الكلب- Dog	rCan f 1	Lipocalin	<0,3 ISU-E
	rCan f 2	Lipocalin	<0,3 ISU-E
	rCan f 5	Arginine Esterase	<0,3 ISU-E
الحصان- Horse	rEqu c 1	Lipocalin	<0,3 ISU-E
القطة- Cat	rFel d 1	Uteroglobin	<0,3 ISU-E
	rFel d 4	Lipocalin	<0,3 ISU-E
الفأرة- Mouse	nMus m 1	Lipocalin	<0,3 ISU-E

### Mold

الترناريا- Alternaria	rAlt a 1	Acidic glycoprotein	<0,3 ISU-E
	rAlt a 6	Enolase	<0,3 ISU-E
فطر الاسبريجيل- Aspergillus	rAsp f 1	Mitogillin family	<0,3 ISU-E
	rAsp f 3	Peroxisomal protein	<0,3 ISU-E
	rAsp f 6	Mn superoxide dismutase	<0,3 ISU-E
العفن- Cladosporium	rCla h 8	Mannitol dehydrogenase	<0,3 ISU-E

### Mite

عنة الغبار- B. tropicalis (HDM)	rBlo t 5	Mite group 5	<0,3 ISU-E
عنة الغبار- D. farinae (HDM)	nDer f 1	Cysteine protease	<0,3 ISU-E
	rDer f 2	NPC2 family	<0,3 ISU-E
عنة الغبار- D. pteronyssinus (HDM)	nDer p 1	Cysteine protease	<0,3 ISU-E
	rDer p 2	NPC2 family	<0,3 ISU-E
عنة الغبار- L. destructor (storage mite)-	rLep d 2	NPC2 family	<0,3 ISU-E
الغبار			

### Cockroach

الصرصار الالماني- Cockroach	rBla g 1	Cockroach group 1	<0,3 ISU-E
	rBla g 2	Aspartic protease	<0,3 ISU-E
	rBla g 5	Glutathione S-transferase	<0,3 ISU-E

## Other mainly species-specific components

### Venom

سم النحل-Honey bee venom	rApi m 1 nApi m 4	Phospholipase A2 Melittin	<0,3 ISU-E <0,3 ISU-E
عقص الدبور-Paper wasp	rPol d 5	Antigen 5	<0,3 ISU-E
عقص الدبور-Common wasp	rVes v 5	Antigen 5	<0,3 ISU-E

ImmunoCAP ISAC should not be used to confirm suspicion of venom allergy. Instead ImmunoCAP sIgE components or complete allergens should be used. When ImmunoCAP ISAC reveals IgE abs to venoms further testing for venom allergy is recommended. The venom components on ImmunoCAP ISAC are CCD free.

### Parasite

نيماتود بحري-Anisakis	rAni s 1	Serine protease inhibitor	<0,3 ISU-E
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### Latex

اللاتكس-Latex	rHev b 1 rHev b 3 rHev b 5 rHev b 6.01	Rubber elongation factor Small rubber particle protein Acidic protein Prohevein	<0,3 ISU-E <0,3 ISU-E <0,3 ISU-E <0,3 ISU-E
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## Cross-reactive components

### Serum albumin

حليب/لحم البقر-Cow's milk/meat	nBos d 6	Serum albumin	6,5 ISU-E	
الكلب-Dog	nCan f 3	Serum albumin	1,3 ISU-E	
الحصان-Horse	nEqu c 3	Serum albumin	0,8 ISU-E	
القطة-Cat	nFel d 2	Serum albumin	2,8 ISU-E	

An abundant protein present in different animal 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

نيماتود بحري-Anisakis	rAni s 3	Tropomyosin	<0,3 ISU-E
الصرصار الالماني-Cockroach	nBla g 7	Tropomyosin	<0,3 ISU-E
عنة الغبار-(HDM)-D. pteronyssinus	rDer p 10	Tropomyosin	<0,3 ISU-E
القربيدس-Shrimp	nPen 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)

الفستق السوداني-Peanut	rAra h 9	Lipid transfer protein (nsLTP)	<0,3 ISU-E
البن دق-Hazelnut	rCor a 8	Lipid transfer protein (nsLTP)	<0,3 ISU-E
الجوز-Walnut	nJug r 3	Lipid transfer protein (nsLTP)	<0,3 ISU-E
الدرائق-Peach	rPru p 3	Lipid transfer protein (nsLTP)	<0,3 ISU-E
الشيح-Mugwort	nArt v 3	Lipid transfer protein (nsLTP)	<0,3 ISU-E
شجرة الزيتون-Olive pollen	nOle e 7	Lipid transfer protein (nsLTP)	<0,3 ISU-E
شجرة الدلب-Plane tree	rPla a 3	Lipid transfer protein (nsLTP)	<0,3 ISU-E

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 often associated with systemic and more severe reactions in addition to OAS. LTP proteins are stable to heat and digestion causing reactions also to cooked foods.

### PR-10 protein

شجرة القصبان-Birch	rBet v 1	PR-10 protein	<0,3 ISU-E
شجرة النغت-Alder	rAln g 1	PR-10 protein	<0,3 ISU-E
شجرة البن دق-Hazel pollen	rCor a 1.0101	PR-10 protein	<0,3 ISU-E
البن دق-Hazelnut	rCor a 1.0401	PR-10 protein	<0,3 ISU-E
التفاح-Apple	rMal d 1	PR-10 protein	<0,3 ISU-E
الدرائق-Peach	rPru p 1	PR-10 protein	<0,3 ISU-E
فول الصويا-Soybean	rGly m 4	PR-10 protein	<0,3 ISU-E
الفستق السوداني-Peanut	rAra h 8	PR-10 protein	<0,3 ISU-E

## Cross-reactive components

### PR-10 protein

Kiwi- فاكهة الكيوي	rAct d 8	PR-10 protein	<0,3 ISU-E
Celery- الكرفس	rApi 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.

### Thaumatin-like protein

Kiwi- فاكهة الكيوي	nAct d 2	Thaumatin-like protein	<0,3 ISU-E
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Act d 2 may give rise to cross-reactivity with other thaumatin-like proteins. Thaumatin-like proteins have been found in pollen, fruits (e.g. apple and grape), fungi (*Alternaria*), mites and insects.

### Profilin

Birch- شجرة القصبان	rBet v 2	Profilin	<0,3 ISU-E
Latex- اللاتكس	rHev b 8	Profilin	<0,3 ISU-E
Annual mercury- الحرير الأملس	rMer a 1	Profilin	<0,3 ISU-E
Timothy grass- عصوية المروج	rPhl 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-	nMUXF3	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- شجرة القصبان	rBet v 4	Polcalcin	<0,3 ISU-E
Timothy grass- عصوية المروج	rPhl p 7	Polcalcin	<0,3 ISU-E

Markers for cross-reactivity between pollen.

### ISAC Standardized Units (ISU-E)

#### Level

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