

Lebensmittelchemische Gesellschaft Fachgruppe in der Gesellschaft Deutscher Chemiker; Biochemical und Molecularbiological Analysis



Suppliers of Allergen Test Kits: ELISA and rapid test kits (lateral flow)

NOTE:

The Working Group does not guarantee the correctness and completeness of the provided information. This listing of allergen test kit suppliers does not contain any judgement or endorsement. It is solely based on information commonly available provided by the suppliers/manufacturers of the kits. Additional information or corrections are welcome and should be sent to the chairperson of the working group.

Updated information is available on:

ELISA Systems <u>www.elisasystems.com</u>
Suppliers Germany: <u>www.thermofisher.com/microbiology</u>

Morinaga Institute of Biological Science http://www.miobs-e.com/
Suppliers Germany: https://www.crystalchem.com/; https://hyserve.com/

Neogen Europe Ltd http://www.neogeneurope.com/

R-Biopharm AG www.r-biopharm.de

Romer Labs Deutschland GmbH https://www.romerlabs.com/

BioFront Technologies www.BioFronttech.com

Detailed information provided by BioFront Technologies:

Kit	MonoTrace Almond ELISA	MonoTrace Almond ELISA	MonoTrace Brazil nut ELISA	MonoTrace Buckwheat ELISA
Product Line	MonoTrace ELISA kits	MonoTrace ELISA kits	MonoTrace ELISA kits	MonoTrace ELISA kits
Catalogue No.	AP1-EK	AP2-EK	BN-EK	BW1-EK
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Quantitative Sandwich ELISA (10 + 10 + 10 minute incubation steps)	Quantitative Sandwich ELISA (10 + 10 + 10 minute incubation steps)	Quantitative Sandwich ELISA (10 + 10 + 10 minute incubation steps)	Quantitative Sandwich ELISA (10 + 10 + 10 minute incubation steps)
Antibody Specificity / Target Protein	Monoclonal antibodies targeting a major almond allergen	Monoclonal antibodies targeting a major almond allergen	Monoclonal antibodies targeting a major Brazil nut allergen	Monoclonal antibodies targeting a major Brazil nut allergen
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	allergenic commodity/kg food	allergenic commodity/kg food	allergenic commodity/kg food	allergenic commodity/kg food
Limit of Detection (mg/kg)	0,15	0,23	0,14	0,08
Limit of Quantification (mg/kg)	1-40	1-40	1-40	1-40
Standard Composition (e.g. isolated protein from xxx)	Isolated protein from almond flour; 0, 1, 4, 10, 20, 40 mg/kg	Isolated protein from almond flour; 0, 1, 4, 10, 20, 40 mg/kg	Isolated protein from Brazil nut flour; 0, 1, 4, 10, 20, 40 mg/kg	Isolated protein from buckwheat flour; 0, 1, 4, 10, 20, 40 mg/kg
Cross Reactivity	mahalab (0.0546%), Cashew (0.0022%), hazelnut (0.00015%), pecan (0.00021%), walnut (0.00073%), pumpkin seed (0.0005%), sunflower seed (0.0054%), and apple (0.00092%)	Mahalab (0.096%), Sunflower seed (0.0004%)	At concentrations as high as 100,000 ppm, the assay shows no cross-reactivity to other matrices including tree nuts, legumes, seeds, flour, meats & spices.	Walnut (0.1297%), pecan (0.0517%), and pistachio (0.0101%)
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks				

Kit	MonoTrace Casein	MonoTrace Cashew	MonoTrace Coconut	MonoTrace Crustacea
	ELISA	ELISA	ELISA	ELISA
Product Line	MonoTrace ELISA kits	MonoTrace ELISA kits	MonoTrace ELISA kits	MonoTrace ELISA kits
Catalogue No.	CAS-EK	CA2-EK	CN1-EK	CR1-EK
Methodology / Assay principle	Quantitative Sandwich	Quantitative Sandwich	Quantitative Sandwich	Quantitative Sandwich
(e.g. sandwich ELISA or competitive	ELISA (10 + 10 + 10	ELISA (10 + 10 + 10	ELISA (10 + 10 + 10	ELISA (10 + 10 + 10
or other (please describe))	minute incubation steps)	minute incubation steps)	minute incubation steps)	minute incubation steps)
Antibody Specificity / Target Protein	Monoclonal antibodies	Monoclonal antibodies	Monoclonal antibodies	Monoclonal antibodies
	targeting bovine casein	targeting a major cashew	targeting a major coconut	targeting crustacea
		allergen	allergen	tropomyosin
Result expressed in	allergenic commodity/kg	allergenic commodity/kg	allergenic commodity/kg	allergenic commodity/kg
(e.g mg total protein/kg food or mg allergenic commodity/kg food)	food	food	food	food
Limit of Detection (mg/kg)	0,12	0,12	0,13	0,07
Limit of Quantification (mg/kg)	1-20	1-40	1-40	1-40
Standard Composition	bovine casein; 0, 1, 2, 4,	Isolated protein from	Isolated protein from	Isolated protein from
(e.g. isolated protein from xxx)	10, 20 mg/kg	cashew flour; 0, 1, 4, 10,	coconut flour; 0, 1, 4, 10,	homogenized fresh
		20, 40 mg/kg	20, 40 mg/kg	shrimp; 0, 1, 4, 10, 20, 40
				mg/kg
Cross Reactivity	At concentrations as high	Walnut (0.1297%), pecan	Mustard seed (0.0011%),	Octopus (0.0205%) and
	as 100,000 ppm, no	(0.0517%), and pistachio	sesame seed (0.0014%),	mussels (0.0013%)
	cross-reactivity was	(0.0101%)	sweet rice (0.0015%) and	
	observed in a large		white rice (0.0014%)	
	panel of assayed			
	samples, including: tree			
	nuts, legumes, seeds,			
	flour (wheat, corn, oat,			
	rice), egg, beef, fish, and shellfish			
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks				

Kit	MonoTrace Egg ELISA	MonoTrace Gluten ELISA	MonoTrace Hazelnut ELISA	MonoTrace Lupin ELISA
Product Line	MonoTrace ELISA kits	MonoTrace ELISA kits	MonoTrace ELISA kits	MonoTrace ELISA kits
Catalogue No.	EOM-EK	GLI-EK	HC9-EK	LU2-EK
Methodology / Assay principle	Quantitative Sandwich	Quantitative Sandwich	Quantitative Sandwich	Quantitative Sandwich
(e.g. sandwich ELISA or competitive	ELISA (10 + 10 + 10	ELISA (10 + 10 + 10	ELISA (10 + 10 + 10	ELISA (10 + 10 + 10
or other (please describe))	minute incubation steps)	minute incubation steps)	minute incubation steps)	minute incubation steps)
Antibody Specificity / Target Protein	Monoclonal antibodies	Monoclonal antibodies	Monoclonal antibodies	Monoclonal antibodies
	targeting egg ovomucoid	targeting crustacea	targeting a major hazelnut	targeting a major lupin
		tropomyosin	allergen	allergen
Result expressed in	allergenic commodity/kg	allergenic commodity/kg	allergenic commodity/kg	allergenic commodity/kg
(e.g mg total protein/kg food or mg allergenic commodity/kg food)	food	food	food	food
Limit of Detection (mg/kg)	0,3	0.36 ppm gluten	0,04	0,13
		(0.18 ppm gliadin)		
Limit of Quantification (mg/kg)	1-40	2-100 ppm gluten	1-40	1-40
		(1-50 ppm gliadin)		
Standard Composition	Isolated protein from NIST	Isolated protein from	Isolated protein from	Isolated protein from lupin
(e.g. isolated protein from xxx)	whole egg powder; 0, 1,	gluten flour; 0, 2, 10, 20,	hazelnut flour; 0, 1, 4, 10,	flour; 0, 1, 4, 10, 20, 40
	4, 10, 20, 40 mg/kg	40, 100 mg/kg gluten	20, 40 mg/kg	mg/kg
Cross Reactivity	At concentrations as high	Prolamins from wheat	Walnut (1.08%), pecan	At concentrations as high
	as 100,000 ppm, the	(gliadin), rye (secalin) and	(0.011%) and fava bean	as 1,000,000 ppm, no
	assay shows no cross-	barley (hordein). At	(0.0018%)	cross-reactivity was
	reactivity to other matrices	concentrations as high as		observed in a large panel
	including tree nuts,	100,000 ppm, no cross-		of matrices including
	legumes, seeds, flour,	reactivity was observed in		legumes, tree nuts,
	meats & spices.	a large panel of assayed		seeds, flour, meats, and
		samples, including:		spices.
		cereals, tree nuts,		
		legumes, seeds, meats		
		and spices.		
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks				

Kit	MonoTrace Macadamia	MonoTrace Mustard ELISA	MonoTrace Peanut
	nut ELISA		ELISA
Product Line	MonoTrace ELISA kits	MonoTrace ELISA kits	MonoTrace ELISA kits
Catalogue No.	MN1-EK	MS1-EK	PA3-EK
Methodology / Assay principle	Quantitative Sandwich	Quantitative Sandwich ELISA (10 + 10 + 10 minute	Quantitative Sandwich
(e.g. sandwich ELISA or competitive	ELISA (10 + 10 + 10	incubation steps)	ELISA (10 + 10 + 10
or other (please describe))	minute incubation steps)		minute incubation steps)
Antibody Specificity / Target Protein	Monoclonal antibodies	Monoclonal antibodies targeting the major mustard	Monoclonal antibodies
	targeting a major	allergen Sin a 1	targeting the major
	Macadamia nut allergen		peanut allergen Ara h 3
Result expressed in	allergenic commodity/kg	allergenic commodity/kg food	allergenic commodity/kg
(e.g mg total protein/kg food or mg allergenic commodity/kg food)	food		food
Limit of Detection (mg/kg)	0,13	0,13	0,24
Limit of Quantification (mg/kg)	2-80	1-40	1-40
Standard Composition	Isolated protein from	Isolated protein from yellow mustard powder; 0, 1, 4,	Isolated protein from
(e.g. isolated protein from xxx)	Macadamia nut flour; 0, 2,	10, 20, 40 mg/kg	NIST peanut butter; 0, 1,
	10, 20, 40, 80 mg/kg		4, 10, 20, 40 mg/kg
Cross Reactivity	Pecan (0.0036%)	Varying levels of cross-reactivity was observed within	Pumpkin seed
		members of the Brassica family: yellow (100%), brown	(0.0025%), cayenne
		(121%) and black (134%) mustard seeds, cabbage	pepper (0.0011%) and
		seed (121%), rapeseed (119%), and radish seed	nutmeg (0.0026%).
		(107%). Pinto (0.0014%) and Romano (0.0018%)	
		beans, amaranth (0.0018%), quinoa (0.0013%) and	
		rye (0.0007%) flours as well as cress (0.0029%) were	
		minimally cross-reactive in the assay.	
Approval			
(e.g. AOAC or certification e.g. FDA)			
Remarks			

Kit	MonoTrace Pecan	MonoTrace Pine nut	MonoTrace Pistachio	MonoTrace Sesame
	ELISA	ELISA	ELISA	ELISA
Product Line	MonoTrace ELISA kits	MonoTrace ELISA kits	MonoTrace ELISA kits	MonoTrace ELISA kits
Catalogue No.	PC4-EK	PN1-EK	PV1-EK	SE1-EK
Methodology / Assay principle	Quantitative Sandwich	Quantitative Sandwich	Quantitative Sandwich	Quantitative Sandwich
(e.g. sandwich ELISA or competitive	ELISA (10 + 10 + 10	ELISA (10 + 10 + 10	ELISA (10 + 10 + 10	ELISA (10 + 10 + 10
or other (please describe))	minute incubation steps)	minute incubation steps)	minute incubation steps)	minute incubation steps)
Antibody Specificity / Target Protein	Monoclonal antibodies	Monoclonal antibodies	Monoclonal antibodies	Monoclonal antibodies
	targeting a major pecan	targeting a major pine nut	targeting a major	targeting a major
	allergen	allergen	pistachio allergen	pistachio allergen
Result expressed in	allergenic commodity/kg	allergenic commodity/kg	allergenic commodity/kg	allergenic commodity/kg
(e.g mg total protein/kg food or	food	food	food	food
mg allergenic commodity/kg food)				
Limit of Detection (mg/kg)	0,17	0,24	0,12	0,3
Limit of Quantification (mg/kg)	1-40	1-40	1-40	1-40
Standard Composition	Isolated protein from	Isolated protein from pine	Isolated protein from	Isolated protein from
(e.g. isolated protein from xxx)	pecan flour; 0, 1, 4, 10,	nut flour; 0, 1, 4, 10, 20,	pistachio flour; 0, 1, 4, 10,	sesame flour; 0, 1, 4, 10,
	20, 40 mg/kg	40 mg/kg	20, 40 mg/kg	20, 40 mg/kg
Cross Reactivity	Walnut (21.2%) and	Pecan (0.0020%), walnut	Pecan (0.001%)	Almond (0.020%), cashew
	Adzuki bean (0.0002%)	(0.0019%), and		(0.022%), hazelnut
		buckwheat (.0012)		(0.012%), pecan (0.206%)
				and sunflower seed
				(0.025%)
Approval				
(e.g. AOAC or certification e.g. FDA)				
Remarks				

Kit	MonoTrace Soy ELISA	MonoTrace Walnut	
		ELISA	
Product Line	MonoTrace ELISA kits	MonoTrace ELISA kits	
Catalogue No.	SG6-EK	WJ4-EK	
Methodology / Assay principle	Quantitative Sandwich	Quantitative Sandwich	
(e.g. sandwich ELISA or competitive	ELISA (10 + 10 + 10	ELISA (10 + 10 + 10	
or other (please describe))	minute incubation steps)	minute incubation steps)	
Antibody Specificity / Target Protein	Monoclonal antibodies	Monoclonal antibodies	
	targeting a major	targeting a major walnut	
	pistachio allergen	allergen	
Result expressed in	allergenic commodity/kg	allergenic commodity/kg	
(e.g mg total protein/kg food or	food	food	
mg allergenic commodity/kg food)			
Limit of Detection (mg/kg)	0,14	0,22	
Limit of Quantification (mg/kg)	1-40	1-40	
Standard Composition	Isolated protein from soy	Isolated protein from	
(e.g. isolated protein from xxx)	flour; 0, 1, 4, 10, 20, 40	walnut flour; 0, 1, 4, 10,	
	mg/kg	20, 40 mg/kg	
Cross Reactivity	Chickpea/garbanzo bean	Pecan (0.0023%), adzuki	
	(Cicer arietinum)	bean (0.002%), rapeseed	
	(0.0060%), garfava flour	(0.0014%), and nutmeg	
	(0.0025%), peanut	(0.0018%)	
	(0.0017%) and lentils		
	(0.0010%)		
Approval			
(e.g. AOAC or certification e.g. FDA)			
Remarks			

Additional information BioFront Technologies:

Do you develop your kits according to DIN EN 15633-1? >> No

Has your company any certification concerning the production of kits?

Do you provide a validation report?

>> Yes, Internal validation reports are available for each kit.

Does this report include data about the performance in processed food?

>> If such material is available through reference and quality control material providers then it is included.

Do you provide information about changing standard materials and antibodies (batch number) to your customers? >> Standards and antibodies are never altered.

Contact information BioFront Technologies:

BioFront Technologies

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Tallahassee, FL 32303

email: info@biofronttech.com
URL: www.BioFronttech.com

Detailed information provided by ELISA Systems:

Kit	Almond	Beta-lactoglobulin	Casein	Crustacean Troprmyosin
				Tropiniyosiii
Product Line				
Catalogue No.	ESARD-48	ESMRDBLG-48	ESCASPRD-48	ESCRUD-48
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA	Sandwich ELISA	Sandwich ELISA	Sandwich ELISA
Antibody Specificity / Target Protein	Heat Stable Almond protein band in EPP	Bovine Beta-Lactoglobulin	Bovine Casein	Tropomyosin (from Penaeus monodon)
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	ppm almond protein = mg total protein/kg food	ppm BLG = mg BLG/kg food	ppm Skim Milk Powder= mg skim milk powder/kg food	ppm Tropomyosin = mg Tropomyosin/kg food
Limit of Detection (mg/kg)	<0.25ppm	<0.05 ppm	<0.5ppm	<0.025ppm
Limit of Quantification (mg/kg)	0.5ppm	0.1ppm	1ppm	0.05ppm
Standard Composition (e.g. isolated protein from xxx)	Protein extract from Prunus dulcis	Sigma BLG	Alpha s Casein (sigma)	Tropomyosin (from Penaeus monodon)
Cross Reactivity	seed kernels of other Prunus spp	BLG of other ruminants eg ewes and goats	Casein of other ruminants eg ewes and goats	Other crustacean species, some insects
Approval (e.g. AOAC or certification e.g. FDA)	Nil	The Compendium of Food Allergen Methodologies - Health Canada	The Compendium of Food Allergen Methodologies - Health Canada	Nil
Remarks				

Kit	Egg	Gluten	Hazelnut	Lupin
Product Line				
Catalogue No.	ESEGG-48	ESGLUT-48	ESHRD-48	ESLFP-48
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA	Sandwich ELISA	Sandwich ELISA	Sandwich ELISA
Antibody Specificity / Target Protein	Ovomucoid	R5 sequence	13 to 14 kDa protein band common to both raw and roasted hazelnuts (Corylus avellana)	Lupin albus and L angustifolia proteins
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	ppm egg powder = mg egg powder/kg food	ppm gliadin = mg gliadin /kg food	ppm hazelnut protein = mg total protein/kg food	ppm lupin protein = mg lupin protein/kg food
Limit of Detection (mg/kg)	<0.5ppm	<0.5ppm	<0.25ppm	<0.25ppm
Limit of Quantification (mg/kg)	1.0ppm	1.0ppm	0.5ppm	0.5ppm
Standard Composition (e.g. isolated protein from xxx)	NIST RM8445 Whole Egg Powder	PWG Gliadin Standard	Protein extract from Corylus avellana	Protein isolates from the flours of <i>L</i> albus and <i>L</i> angustifolia
Cross Reactivity	None observed	Millet, Rice weak reaction if >20% of matrix	None observed	Soy beans, paprika
Approval (e.g. AOAC or certification e.g. FDA)	Nil	Nil	CEN/TS 15633-3:2012	Nil
Remarks				

Kit	Mustard	Peanut	Sesame	Soy
Product Line				
Catalogue No.	ESMUS-48	ESPRDS-48	ESSESE-48	ESSOYPRD-48
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA	Sandwich ELISA	Sandwich ELISA	Sandwich ELISA
Antibody Specificity / Target Protein	Mustard Seed Proteins	Ara h2	Heat stable 2S albumin	Soy Trypsin Inhibitor plus process soy proteins
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	ppm mustard protein = mg protein/kg food	ppm peanut protein= mg protein/kg food	ppm sesame seed protein = mg protein/kg food	ppm soy protein = mg protein/kg food
Limit of Detection (mg/kg)	<0.5ppm	<0.125ppm	<0.125ppm	<1.25ppm
Limit of Quantification (mg/kg)	1.0ppm	0.25ppm	0.25ppm	2.5ppm
Standard Composition (e.g. isolated protein from xxx)	Protein Isolates from Sinapsis alba and Brassica nigra	Protein extract from raw peanuts	Protein extract from raw sesame seeds	Protein extract from soy flour
Cross Reactivity	Seeds of other <i>Brassica</i> spp	None observed	Basil (>4% of matrix) Rosemary (>20% of matrix)	Lupin albus - trace <2.5ppm at 100% of matrix
Approval (e.g. AOAC or certification e.g. FDA)	Nil	Nil	Nil	Nil
Remarks				

Kit	Total Milk		
Product Line			
Catalogue No.	ESTMLK-48		
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA		
Antibody Specificity / Target Protein	Bovine Casein + BLG		
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	ppm total milk protein = mg protein/kg food		
Limit of Detection (mg/kg)	<0.125ppm		
Limit of Quantification (mg/kg)	0.25ppm		
Standard Composition (e.g. isolated protein from xxx)	Sigma Casein and BLG		
Cross Reactivity	Milk from other ruminants (goat and sheep)		
Approval (e.g. AOAC or certification e.g. FDA)	Nil		
Remarks			

Additional information ELISA Systems:

Do you develop your kits according to DIN EN 15633-1? >> Yes

Has your company any certification concerning the production of kits? >> No - ELISA Systems uses an extensive internal Quality System but no external certification.

Do you provide a validation report?

>> Yes - to customers

Does this report include data about the performance in processed food?

>> Yes - We also recommend that all laboratories conduct their own validation study - to verify their technique and study the performance of their samples matrices.

Do you provide information about changing standard materials and antibodies (batch number) to your customers? >> If Standards are changed – Yes
If the antibody batch is changed the kit is re-validated and a new validation report generated

Contact information ELISA Systems:

ELISA Systems 8 Cox Road Windsor Qld.4030 AUSTRALIA

email: international@elisasystems.net

URL: www.elisasystems.com

Detailed information provided by Morinaga Institute of Biological Science:

Kit	Egg (Ovalbumin) ELISA Kit	Casein ELISA Kit	Wheat/Gluten ELISA Kit	Peanut ELISA Kit
Product Line	ELISA version 1	ELISA version 1	ELISA version 1	ELISA version 1
Catalogue No.	M2101	M2102	M2103	M2104
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA	Sandwich ELISA	Sandwich ELISA	Sandwich ELISA
Antibody Specificity / Target Protein	Ovalbumin	Casein	Gliadin	Partially purified peanut protein
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	μg total egg protein / g food	μg total milk protein / g food	μg total wheat protein / g food or μg gluten / g food	μg total peanut protein / g food
Limit of Detection (mg/kg)	0.31 µ g/g	0.31 µ g/g	0.31 µ g/g	0.31 µ g/g
Limit of Quantification (mg/kg)	0.31 µ g/g	0.31 µ g/g	0.31 µg/g or 0.26 µg/g (gluten)	0.31 µ g/g
Standard Composition (e.g. isolated protein from xxx)	Whole egg protein	Milk protein	Wheat protein	Peanut protein
Cross Reactivity	Shown on web page http://www.miobs- e.com/index.html			
Approval (e.g. AOAC or certification e.g. FDA)	-	-	AOAC PTM	-
Remarks	Same extraction solution between all ELISA kit version 1	Same extraction solution between all ELISA kit version 1	Same extraction solution between all ELISA kit version 1	Same extraction solution between all ELISA kit version 1

Kit	Egg (Ovalbumin) ELISA Kit II	Beta-lactoglobulin ELISA Kit II	Casein ELISA Kit II	Wheat/Gluten (Gliadin) ELISA Kit II
Product Line	ELISA version 2	ELISA version 2	ELISA version 2	ELISA version 2
Catalogue No.	M2111	M2112	M2113	M2114
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA	Sandwich ELISA	Sandwich ELISA	Sandwich ELISA
Antibody Specificity / Target Protein	Ovalbumin	Beta-lactoglobulin	Casein	Gliadin
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	µg total egg protein / g food	µg total milk protein / g food	µg total milk protein / g food	μg total wheat protein / g food or μg gluten / g food
Limit of Detection (mg/kg)	0.31 µ g/g	0.31 µ g/g	0.31 µ g/g	0.31 µ g/g
Limit of Quantification (mg/kg)	0.31 µg/g	0.31 µg/g	0.31 µg/g	0.31 μ g/g or 0.26 μg/g (gluten)
Standard Composition (e.g. isolated protein from xxx)	Whole egg protein	Milk protein	Milk protein	Wheat protein
Cross Reactivity	Shown on web page http://www.miobs- e.com/index.html			
Approval (e.g. AOAC or certification e.g. FDA)	Japanese official method	-	Japanese official method	Japanese official method
Remarks	Same extraction solution between all ELISA kit version 2			

Kit	Buckwheat ELISA Kit II	Peanut ELISA Kit II	Soya ELISA Kit II	Sesame ELISA Kit II
Product Line	ELISA version 2	ELISA version 2	ELISA version 2	ELISA version 2
Catalogue No.	M2115	M2116	M2117	Not set
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA	Sandwich ELISA	Sandwich ELISA	Sandwich ELISA
Antibody Specificity / Target Protein	Partially purified buckwheat protein	Partially purified peanut protein	Beta-conglycinin	11s globulin
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	μg total buckwheat protein / g food	μg total peanut protein / g food	μg total soya protein / g food	µg total sesame protein / g food
Limit of Detection (mg/kg)	0.31 µ g/g	0.31 µ g/g	0.31 μ g/g	0.31 μ g/g
Limit of Quantification (mg/kg)	0.31 µg/g	0.31 µ g/g	0.31 µg/g	0.31 µg/g
Standard Composition (e.g. isolated protein from xxx)	Buckwheat protein	Peanut protein	Milk protein	Whole sesame protein
Cross Reactivity	Shown on web page http://www.miobs- e.com/index.html	Shown on web page http://www.miobs- e.com/index.html	Shown on web page http://www.miobs- e.com/index.html	Written in the validation report
Approval (e.g. AOAC or certification e.g. FDA)	Japanese official method	Japanese official method	-	Not released yet, but sample kit is available to evaluate
Remarks	Same extraction solution between all ELISA kit version 2			

Kit	Crustacea ELISA Kit II	Hazelnut ELISA Kit II	
Product Line	ELISA version 2	ELISA version 2	
Catalogue No.	Not set	Not set	
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA	Sandwich ELISA	
Antibody Specificity / Target Protein	Tropomyosin	-	
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	μg total crustacea protein / g food	μg total hazelnut protein / g food	
Limit of Detection (mg/kg)	0.31 µ g/g	0.31 µ g/g	
Limit of Quantification (mg/kg)	0.31 µg/g	0.31 µ g/g	
Standard Composition (e.g. isolated protein from xxx)	Crustacea protein	Hazelnut protein	
Cross Reactivity	Not ready yet	Not ready yet	
Approval (e.g. AOAC or certification e.g. FDA)	Not released yet, but sample kit is available to evaluate	Not released yet. Sample kit will be ready in Feb, 2019.	
Remarks	Same extraction solution between all ELISA kit version 2	Same extraction solution between all ELISA kit version 2	

Additional information Morinaga Institute of Biological Science:

Do you develop your kits according to DIN EN 15633-1? >> No, but we have ISO9001 accreditation.

Has your company any certification concerning the production of kits? >> To reiterate, we have ISO9001.

Do you provide a validation report?

>> Yes, we list validation reports on our web site (http://www.miobs-e.com/index.html), but need ID / Password to download.

Does this report include data about the performance in processed food? >> Yes, the report includes spiked foods and incurred foods data.

Do you provide information about changing standard materials and antibodies (batch number) to your customers? >> If requested, yes, we can provide. Also, when the batch number of antibodies is changed, the food reactivity data listed on our web page will be renewed.

Contact information Morinaga Institute of Biological Science:

Morinaga Institute of Biological Science, Inc

2-1-16, Sachiura, Kanazawa

Yokohama

Japan 236-0003

email: info@miobs.com

URL: http://www.miobs-e.com/

Detailed information provided by Neogen:

Kit	Veratox for Peanut	Veratox for Crustacea	Veratox for Casein	Veratox for Almond
Product Line	Veratox	Veratox	Veratox	Veratox
Catalogue No.	8430	8520	8460	8440
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich/Elisa	Sandwich/Elisa	Sandwich/Elisa	Sandwich/Elisa
Antibody Specificity / Target Protein	Peanut protein	Crustacea protein	Casein	Almond Proteins
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	Peanut with conversion factor to peanut protein	Crustacea with conversion factor to crustacea protein	NFDM (Non Fat Dried Milk)	Almond with conversion factor to almond protein
Limit of Detection (mg/kg)	The limit of detection was found to be 1.0 ppm	The limit of detection was found to be < 1.0 ppm	The limit of detection was found to be 1.0 ppm on a NFDM scale	The limit of detection was found to be < 1.0 ppm
Limit of Quantification (mg/kg)	2.5-25 ppm Peanut	2.5–25 ppm Crustacea	2.5 – 15 ppm Casein	2.5–25 ppm Almond
Standard Composition (e.g. isolated protein from xxx)	22 varieties of raw and roasted peanuts	Whole dried shrimp	Non-fat dried milk	A blend of common raw and roasted almonds
Cross Reactivity				Prunus sp. family seeds and apple seeds
Approval (e.g. AOAC or certification e.g. FDA)	AOAC-RI	None	None	None
Remarks				

Kit	Veratox for Egg	Veratox for Gliadin R5	Veratox for Gliadin	Veratox for Hazelnut
Product Line	Veratox	Veratox	Veratox	Veratox
Catalogue No.	8450	8510	8480	8420
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich/Elisa	Sandwich/Elisa	Sandwich/Elisa	Sandwich/Elisa
Antibody Specificity / Target Protein	Unprocessed and Heat processed Egg white proteins	Prolamins from wheat, rye, barley and hybrids	Prolamins from wheat, rye, barley and hybrids	Hazelnut Proteins
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	Whole dried egg with conversion factor to egg protein	Gliadin with conversion factor to Gluten	Gliadin with conversion factor to Gluten	Hazelnut Proteins
Limit of Detection (mg/kg)	The limit of detection was found to be 0.6 ppm	From AOAC validation: cereal–2.16 ppm; cooked hamburger–1.21 ppm; bread–0.63 ppm; and rice flour–1.23 ppm. Neogen internally validated commodity limit of detections (LODs) were all under 2.5 ppm	The limit of detection was found to be < 5.0 ppm	The limit of detection was found to be < 1.0 ppm
Limit of Quantification (mg/kg)	2.5–25 ppm Egg	2.5-40 ppm Gliadin R5	5-50 ppm Gliadin	2.5–25 ppm Hazelnut
Standard Composition (e.g. isolated protein from xxx)	Whole dried egg and baked whole dried egg	Wheat Gliadin	Wheat Gliadin	A mix of raw and roasted hazelnuts
Cross Reactivity				
Approval (e.g. AOAC or certification e.g. FDA)	None	AOAC-RI		None
Remarks				
	1	1	1	1

Kit	Veratox for Mustard	Veratox for Soy	Veratox for Sesame	Veratox for Total Milk
Product Line	Veratox	Veratox	Veratox	Veratox
Catalogue No.	8400	8410	8530	8470
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich/Elisa	Sandwich/Elisa	Sandwich/Elisa	Sandwich/Elisa
Antibody Specificity / Target Protein	Mustard proteins (White, black and brown)	Soy proteins	Sesame proteins (black, white and brown)	Casein and whey proteins from bovine, sheep and goat
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	Mustard with conversion to mustard protein	Soy flour, conversions available to soy protein and to SPI (soy protein isolate)	Sesame	Non-Fat Dried Milk (NFDM) with conversion to milk protein
Limit of Detection (mg/kg)	The limit of detection was found to be < 1.0 ppm	The limit of detection was found to be 0.96 ppm	The limit of detection was found to be 0.5 ppm	The limit of detection was found to be < 1.0 ppm on a NFDM scale
Limit of Quantification (mg/kg)	2.5–25 ppm Mustard	2.5-25 ppm Soy	2.5–25 ppm Sesame	2.5–25 ppm Total Milk
Standard Composition (e.g. isolated protein from xxx)	Mustard seed	Soy Protein Isolate (SPI)	Black Sesame	Non Fat Dried Milk
Cross Reactivity	Seeds from Brassicaceae family e.g. Rapeseed seeds and Broccoli seeds		Almond, macadamia nut, linseed and sunflower seed when tested at 100%.	
Approval (e.g. AOAC or certification e.g. FDA)	None	None	None	None
Remarks			Not suitable for testing (e.g., sesame products that have been highly processed, such as fully refined sesame oil, or have undergone a harsh heat treatment such as toasting).	

Kit	Reveal 3-D for Gliadin	Reveal 3-D for Almond	Reveal 3-D for Crustacea	Reveal 3-D for Egg
Product Line	Reveal	Reveal	Reveal	Reveal
Catalogue No.	8519	902086G	902081S	902082Q
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Lateral Flow	Lateral Flow	Lateral Flow	Lateral Flow
Antibody Specificity / Target Protein	Prolamins from wheat, rye, barley and hybrids	Almond proteins	Crustacea proteins	Unprocessed and heat processed egg white proteins
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	Gliadin	Almond	Crustacea	Whole dried Egg
Limit of Detection (mg/kg)	Swabs - 1 µg/100 cm2 of gliadin extract Rinses - 5 ppm (10 ppm gluten)	Swabs - 1 µg/ 100 cm2 of almond Rinses - 5 ppm total almond	Swabs - 40 µg/100 cm2 of cooked prawn extract Rinses - 5–10 ppm.	Swabs - 10 µg/100 cm2 of whole egg extract Rinses - 5 ppm
Limit of Quantification (mg/kg)				
Standard Composition (e.g. isolated protein from xxx)				
Cross Reactivity		Prunus sp. family seeds and apple seeds		
Approval (e.g. AOAC or certification e.g. FDA)	None	None	None	None
Remarks	Lateral Flow Screening Test	Lateral Flow Screening Test	Lateral Flow Screening Test	Lateral Flow Screening Test

Kit	Reveal 3-D for Gluten	Reveal 3-D for Hazelnut	Reveal 3-D for Mustard	Reveal 3-D for Peanut
Product Line	Reveal	Reveal	Reveal	Reveal
Catalogue No.	901031P	902087E	8405	901041L
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Lateral Flow	Lateral Flow	Lateral Flow	Lateral Flow
Antibody Specificity / Target Protein	Prolamins from Wheat, rye, barley and hybrids	Hazelnut proteins	Mustard proteins	Peanut proteins
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	Gluten	Hazelnut	Mustard	Peanut
Limit of Detection (mg/kg)	Swabs - 80 µg/ 100 cm2 of gluten extract Rinses - 5–10 ppm	Swabs - 10 µg/100 cm2 of hazelnut extract Rinses - 5–10 ppm	Swabs - 20 µg/ 100 cm2 of mustard Rinses - 5–10 ppm	Swabs - 2 µg/100 cm2 of peanut Rinses - 5 ppm total peanut
Limit of Quantification (mg/kg)				
Standard Composition (e.g. isolated protein from xxx)				
Cross Reactivity		Walnut	Seeds from Brassicaceae family e.g. Rapeseed seeds and Broccoli seeds	
Approval (e.g. AOAC or certification e.g. FDA)	None	None	None	None
Remarks	Lateral Flow Screening Test	Lateral Flow Screening Test	Lateral Flow Screening Test	Lateral Flow Screening Test

Kit	Reveal 3-D for Sesame	Reveal 3-D for Soy	Reveal 3-D for Total Milk	Biokits BLG
Product Line	Reveal	Reveal	Reveal	Biokits
Catalogue No.	8535	902093K	8479	902061Y
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Lateral Flow	Lateral Flow	Lateral Flow	Indirect competitive enzyme immunoassay
Antibody Specificity / Target Protein	Sesame proteins	Soy protein	Casein and Whey proteins from bovine sp.	BLG
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	Sesame	Soy	Non Fat Dried Milk	BLG
Limit of Detection (mg/kg)	Swabs - 5 µg/ 100 cm2 of sesame Rinses - 5–10 ppm.	Swabs - 2 µg/100 cm2 of soy protein Rinses - 5 ppm total soy	Swabs - 20 µg/100 cm2 of milk (casein or whey) Rinses - 5 ppm non-fat dried milk (NFDM)	<2 ppm BLG
Limit of Quantification (mg/kg)				2.5-40 ppm BLG
Standard Composition (e.g. isolated protein from xxx)				BLG control. Milk protein standard.
Cross Reactivity				Not suitable for testing 100% egg products (raw or powder).
Approval (e.g. AOAC or certification e.g. FDA)	None	None	None	
Remarks	Lateral Flow Screening Test. Not suitable for testing (e.g., sesame products that have been highly processed, such as fully refined sesame oil, or have undergone a harsh heat treatment such as toasting).	Lateral Flow Screening Test	Lateral Flow Screening Test	

Kit	Biokits Walnut	Alert for Gliadin	Alert for Gliadin R5	Alert for Peanut
Product Line	Biokits	Alert	Alert	Alert
Catalogue No.	902085J	8481	8511	8431
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich/Elisa	Sandwich/Elisa	Sandwich/Elisa	Sandwich/Elisa
Antibody Specificity / Target Protein	Walnut	Prolamins of wheat, rye, barley and hybrids	Prolamins of wheat, rye, barley and hybrids	Peanut proteins
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	Walnut with conversion to protein available	Gliadin	Gliadin	Peanut
Limit of Detection (mg/kg)	0.25 ppm Walnut	10 ppm	10 ppm	5 ppm
Limit of Quantification (mg/kg)	2.4 – 120 ppm Walnut			
Standard Composition (e.g. isolated protein from xxx)	Walnut (<i>Juglans regia</i>)	Wheat Gliadin	Wheat Gliadin	22 varieties of raw and roasted peanut
Cross Reactivity	Pecan (2.3%); quinoa (0.0012%); pistachio (0.0009%); hazelnut (0.0005%); buckwheat (0.00024%)			
Approval (e.g. AOAC or certification e.g. FDA)	None	None	None	None
Remarks		ELISA Microwell Visual Screening Test	ELISA Microwell Visual Screening Test	ELISA Microwell Visual Screening Test

Kit	Alert for Soy	Alert for Total Milk	Reveal for Multi Treenut
Product Line	Alert	Alert	Reveal
Catalogue No.	8411	8471	8555
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich/Elisa	Sandwich/Elisa	Lateral Flow
Antibody Specificity / Target Protein	Soy proteins	Casein and Whey proteins from bovine, goat and sheep	Antibodies detect proteins from Almond, Hazelnut, Cashew, Pistachio, Walnut and Pecan
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	Soy Flour	Non-Fat Dried Milk	Treenuts (Almond, hazelnut, cashew, pistachio, walnut, pecan)
Limit of Detection (mg/kg)	2.5 ppm	5 ppm (or 10 ppm, depending on the control used)	5-10 ppm from CIP rinses waters. Levels of 5 µg/100 cm2 of walnut extract, 20 µg/100 cm2 of hazelnut or cashew extracts, 30 µg/100 cm2 oil-roasted almond extract and 50 µg/100 cm2 pecan or pistachio extracts can be detected from Teflon surfaces
Limit of Quantification (mg/kg)			
Standard Composition (e.g. isolated protein from xxx)	Soy protein isolate (SPI)	Non-Fat Dried Milk	
Cross Reactivity			Does not detect Macadamia nut or Brazil nut. Cross reactants are seeds from Prunus species, sunflower seeds, sesame, golden linseed, pumpkin seed, chestnut flour, buckwheat flour and desiccated coconut.
Approval (e.g. AOAC or certification e.g. FDA)	None	None	None
Remarks	ELISA Microwell Visual Screening Test	ELISA Microwell Visual Screening Test	Lateral Flow Screening Test

Additional information Neogen:

Do you develop your kits according to DIN EN 15633-1?

>> We develop kits taking into account performance-based criteria from global sources e.g.CEN and AOAC-SMPRs and also peer-reviewed best practice (Abbot et al, Validation Procedures for Quantitative Food Allergen ELISA Methods: Community Guidance and Best Practices).

Has your company any certification concerning the production of kits?

>> Some kits are AOAC-RI (Veratox for Peanut and Veratox for Gliadin R%). Neogen Corporation has ISO:9001 quality system.

Do you provide a validation report?

>> Yes, validation report available on request.

Does this report include data about the performance in processed food?

>> Data on processed foods detection is kit dependent and we highlight limitations on the kit insert e.g. hydrolyzed foods, fermented foods etc.

Do you provide information about changing standard materials and antibodies (batch number) to your customers? >> Yes, changes are highlighted through kit notification slips and direct contact with customers.

Contact information Neogen:

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email: contact_de@neogeneurope.com

URL: www.neogeneurope.de

Detailed information provided by R-Biopharm:

Kit	RIDASCREEN® Gliadin	RIDASCREEN® FAST Gliadin	RIDASCREEN® Gliadin competitive	RIDASCREEN® Gliadin sensitive
Product Line	Gliadin/Gluten ELISA	Gliadin/Gluten ELISA	Gliadin/Gluten ELISA	Gliadin/Gluten ELISA
Catalogue No.	R7001	R7002	R7021	R7051
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA (30+30+30 minutes) quantitative	Competitive ELISA (10+10+10 minutes) quantitative	Sandwich ELISA (30+10 minutes) quantitative	Sandwich ELISA (10+10+10 minutes) quantitative
Antibody Specificity / Target Protein	Specific monoclonal R5 antibodies recognizing prolamins from wheat, rye and barley to the same degree. No reaction with oat, maize, rice, millet.	Specific monoclonal R5 antibodies recognizing prolamins from wheat, rye and barley to the same degree. No reaction with oat, maize, rice, millet.	Specific monoclonal R5 antibodies recognizing prolamins from wheat, rye and barley to the same degree. No reaction with oat, maize, rice, millet.	Specific monoclonal R5 antibodies recognizing prolamins from wheat, rye and barley to the same degree. No reaction with oat, maize, rice, millet.
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	total protein/kg food	total protein/kg food	total protein/kg food	total protein/kg food
Limit of Detection (mg/kg)	0.5 mg/kg gliadin	0.5 mg/kg gliadin	2.6 mg/kg gliadin	0.2 mg/kg gliadin
Limit of Quantification (mg/kg)	2.5 mg/kg gliadin	5 mg/kg gliadin	5 mg/kg Gliadin	2.5 mg/kg gliadin
Standard Composition (e.g. isolated protein from xxx)				
Cross Reactivity				
Approval (e.g. AOAC or certification e.g. FDA)	AOAC-OMA (2012.01); AACCI (38.50.01); AOAC-RI (120601); Codex Alimentarius Method (Typ I)		AOAC-OMA (2015.05 "First Action Status"), AACCI (38- 55.01)	
Remarks				

Kit	RIDA® QUICK Gliadin	RIDASCREEN® FAST Soya	RIDA® QUICK Soya	RIDASCREEN® FAST Milk
Product Line	Gliadin/Gluten Lateral Flow	Allergen ELISA	Allergen Lateral Flow	Allergen milk parameter ELISA
Catalogue No.	R7003-R7005	R7102	R7103	R4652
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Lateral Flow Device	Sandwich ELISA (10+10+10 minutes) quantitative	Lateral Flow Device	Sandwich ELISA (10+10+10 minutes) quantitative
Antibody Specificity / Target Protein	Specific monoclonal R5 antibodies recognizing prolamins from wheat, rye and barley to the same degree. No reaction with oat, maize, rice, millet.	antibodies specifically detect heated soya proteins	antibodies specifically detect heated soya proteins	antibodies specifically detect caseins as well as β-lactoglobulin of cow's milk and of sheep's, goat's and buffalo's milk.
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	total protein/kg food	total protein/kg food	total protein/kg food	milk protein/kg food
Limit of Detection (mg/kg)	surfaces 1.6 - 3 µg gluten/100 cm²; raw material 4.4 mg/kg gluten; processed food 6.3 mg/kg gluten; cleansing water 10 ng/ml gluten; cleansing water 50 - 100 ng/ml gluten	0.24 mg/kg	on surfaces 0.5 µg soya protein/100cm ² ; soya flour in wheat flour 0.5 mg/kg soya protein; in processed food 10 mg/kg soya protein (depending on the matrix)	0.7 mg/kg milk protein
Limit of Quantification (mg/kg)	no quantification	2.5 mg/kg	no quantification	2.5 mg/kg
Standard Composition (e.g. isolated protein from xxx)				
Cross Reactivity		cross-reactivity to legumes of the tribe Phaseoleae (e.g. beans), the genus Vicia (e.g. fava bean), to dried peas / pea flour and to peanut		
Approval (e.g. AOAC or certification e.g. FDA)	AOAC-OMA (2015.16 "Final Action"), AACCI, AOAC-RI (101702)			AOAC-RI (101501)
Remarks				

Kit	RIDASCREEN® FAST	RIDASCREEN® FAST β-	RIDASCREEN® β-	RIDASCREEN® FAST
	Casein	Loctoglobulin	Lactoglobulin	Egg
Product Line	Allergen milk parameter ELISA	Allergen milk parameter ELISA	Allergen milk parameter ELISA	Allergen ELISA
Catalogue No.	R4612	R4912	R4901	R6402
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA (10+10+10 minutes) quantitative	Sandwich ELISA (10+10+10 minutes) quantitative	Competitive ELISA (120+30+15) quantitative	Sandwich ELISA (10+10+10 minutes) quantitative
Antibody Specificity / Target Protein	antibodies specifically detect caseins of cow's milk and caseins of sheep's, goat's and buffalo's milk.	antibodies specifically detect β-lactoglobulin of cow's milk.	antibodies specifically detect β-lactoglobulin of cow's milk.	antibodies specifically detect the egg white proteins ovalbumin and ovomucoid.
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	casein protein/kg food	β-lactoglobulin protein/kg food	β-lactoglobulin protein/kg food	whole egg powder/kg food
Limit of Detection (mg/kg)	0.12 mg/kg	0.04 mg/kg	2.1 mg/kg	0.1 mg/kg
Limit of Quantification (mg/kg)	0.5 mg/kg	0.167 mg/kg	5 mg/kg	0.5 mg/kg
Standard Composition (e.g. isolated protein from xxx)				
Cross Reactivity		cross reactivity to sheep's, goat's, and buffalo's milk	α-, β-, κ-Casein < 1 % α-Lactalbumin < 1 % bovine serum albumin < 1 %	
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks				

Kit	RIDASCREEN® FAST	RIDASCREEN® FAST	RIDASCREEN® FAST	RIDASCREEN® FAST
	Lysozym	Cashew	Peanut	Hazelnut
Product Line	Allergen ELISA	Allergen Nut ELISA	Allergen Nut ELISA	Allergen Nut ELISA
Catalogue No.	R6452	R6872	R6202	R6802
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA (10+10+10 minutes) quantitative	Sandwich ELISA (10+10+10 minutes) quantitative	Sandwich ELISA (10+10+10 minutes) quantitative	Sandwich ELISA (10+10+10 minutes) quantitative
Antibody Specificity / Target Protein	antibodies specifically detect lysozyme of hen's egg	antibodies specifically detect proteins from cashew	antibodies specifically detect peanut proteins, including the peanut allergen Ara h 1 and Ara h 2.	antibodies specifically detect proteins from hazelnut
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	lysozyme protein/kg food	mg allergenic commodity/kg food	mg allergenic commodity/kg food	mg allergenic commodity/kg food
Limit of Detection (mg/kg)	0.006 mg/kg	0.09 mg/kg	0.13 mg/kg	0.19 mg/kg
Limit of Quantification (mg/kg)	0.05 mg/kg	2.5 mg/kg	2.5 mg/kg	2.5 mg/kg
Standard Composition (e.g. isolated protein from xxx)				
Cross Reactivity		cross-reactivity to pistachio	cross reactivity to green pea, lentils, wheat semolina and fenugreek	
Approval (e.g. AOAC or certification e.g. FDA)			AOAC-RI (030404)	
Remarks				

Kit	RIDASCREEN® FAST Macadamia	RIDASCREEN® FAST Almond	RIDASCREEN® FAST Sesame	RIDASCREEN® FAST Crustacean
Product Line	Allergen Nut ELISA	Allergen Nut ELISA	Allergen ELISA	Allergen ELISA
Catalogue No.	R6852	R6901	R7202	R7312
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA (10+10+10 minutes) quantitative	Sandwich ELISA (10+10+10 minutes) quantitative	Sandwich ELISA (10+10+10 minutes) quantitative	Sandwich ELISA (10+10+10 minutes) quantitative
Antibody Specificity / Target Protein	antibodies specifically detect proteins from macadamia	antibodies specifically detect proteins from almonds	antibodies specifically detect proteins from sesame	antibodies specifically detect crustacean-proteins (mainly tropomyosin).
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg allergenic commodity/kg food	mg allergenic commodity/kg food	mg allergenic commodity/kg food	mg allergenic commodity/kg food
Limit of Detection (mg/kg)	0.17 mg/kg	0.1 mg/kg	0.14 mg/kg	2.0 mg/kg
Limit of Quantification (mg/kg)	1.00 mg/kg	2.5 mg/kg	2.5 mg/kg	20 mg/kg
Standard Composition (e.g. isolated protein from xxx)				
Cross Reactivity	cross reactivities to green peas, kidney beans, pinto beans, white beans, poppy seeds, roasted almonds, cashew (native, roasted), roasted hazelnut, roasted peanuts, pecan nut, lentils and walnut (native, roasted) have been observed	cross reactivities to apricot stone, mahaleb cherry (other plants from genus Prunus possible).		Minor cross-reaction was detected with mustard, curcuma, beans, mussels and arthropods
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks				

Kit	RIDASCREEN® FAST	RIDASCREEN® FAST	Bioavid Almond	Bioavid Brazil Nut
	Mustard	Lupine		
Product Line	Allergen ELISA	Allergen ELISA	Allergens	Allergens
Catalogue No.	R6152	R6102	BL601-10/25	BL602-10/25
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA (10+10+10 minutes) quantitative	Sandwich ELISA (10+10+10 minutes) quantitative	Lateral Flow Device	Lateral Flow Device
Antibody Specificity / Target Protein	antibodies specifically detect different kinds of mustard (yellow, white, brown, black mustard).	antibody specifically detects sweet lupine proteins, including the γ-conglutin as well as all European species of sweet lupines (Lupinus albus, luteus and angustifolius)	polyclonal antibodies detect multivalent proteins from species	polyclonal antibodies detect multivalent proteins from species
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg allergenic commodity/kg food	mg allergenic commodity/kg food	mg allergenic commodity/kg food	mg allergenic commodity/kg food
Limit of Detection (mg/kg)	0.5 mg/kg	0.7 mg/kg	1 mg/kg	1 mg/kg
Limit of Quantification (mg/kg)	0.1 mg/kg	1 mg/kg	no quantification	no quantification
Standard Composition (e.g. isolated protein from xxx)				
Cross Reactivity	cross reactivity to kidney beans, pinto beans, white beans, linseed as well as rapeseed and seeds from different cruciferous plants (Brassicaceae)	cross reactivity exists to chickpea, soy flour, roasted hazelnut, curcuma, curry and fenugreek	Apricot seed	
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks				

Kit	Bioavid Cashew kernel	Bioavid Coconut	Bioavid Crustacean	Bioavid Egg
Product Line	Allergens	Allergens	Allergens	Allergens
Catalogue No.	BL610-10/25	BL600-10/25	BL616-10/25	BL608-10/25
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Lateral Flow Device	Lateral Flow Device	Lateral Flow Device	Lateral Flow Device
Antibody Specificity / Target Protein	polyclonal antibodies detect multivalent proteins from species			
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg allergenic commodity/kg food			
Limit of Detection (mg/kg)	1 mg/kg	1 mg/kg	10 mg/kg	1 mg/kg
Limit of Quantification (mg/kg)	no quantification	no quantification	no quantification	no quantification
Standard Composition (e.g. isolated protein from xxx)				
Cross Reactivity	Brazil nut, Hazelnut, Peanut, Walnut		Scallop, Calamari, Mosquito	Chicken Meat
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks				

Kit	Bioavid Hazelnut	Bioavid Macadamia nut	Bioavid Milk	Bioavid Mustard
Product Line	Allergens	Allergens	Allergens	Allergens
Catalogue No.	BL604-10/25	BL605-10/25	BL613-10/25	BL603-10/25
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Lateral Flow Device	Lateral Flow Device	Lateral Flow Device	Lateral Flow Device
Antibody Specificity / Target Protein	polyclonal antibodies detect multivalent proteins from species			
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg allergenic commodity/kg food	mg allergenic commodity/kg food	mg allergenic commodity/kg food	mg allergenic commodity/kg food
Limit of Detection (mg/kg)	5 mg/kg	1 mg/kg	1 mg/kg	1 mg/kg
Limit of Quantification (mg/kg)	no quantification	no quantification	no quantification	no quantification
Standard Composition (e.g. isolated protein from xxx)				
Cross Reactivity	"Pumpkin seed, Walnut			
Approval (e.g. AOAC or certification e.g. FDA)	•	Walnut		"Rapeseed
Remarks	"			

Kit	Bioavid Peanut	Bioavid Pistachio	Bioavid Sesame	Bioavid Walnut
Product Line	Allergens	Allergens	Allergens	Allergens
Catalogue No.	BL606-10/25	BL611-10/25	BL609-10/25	BL607-10/25
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Lateral Flow Device	Lateral Flow Device	Lateral Flow Device	Lateral Flow Device
Antibody Specificity / Target Protein	polyclonal antibodies detect multivalent proteins from species			
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg allergenic commodity/kg food	mg allergenic commodity/kg food	mg allergenic commodity/kg food	mg allergenic commodity/kg food
Limit of Detection (mg/kg)	5 mg/kg	1 mg/kg	1 mg/kg	10 mg/kg
Limit of Quantification (mg/kg)	no quantification	no quantification	no quantification	no quantification
Standard Composition (e.g. isolated protein from xxx)				
Cross Reactivity		Brazil nut, Cashew, Hazelnut, Pumpkin seed, Walnut		Pecan nut, Cashew, Peanut
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks				

Additional information R-Biopharm:

Do you develop your kits according to DIN EN 15633-1? >> Yes - RIDASCREEN® Products; No - Bioavid Products

Has your company any certification concerning the production of kits? >> Yes, ISO 9001: 2015 certification - RIDASCREEN® Products; No - Bioavid Products

Do you provide a validation report?
>> Yes - RIDASCREEN® Products; Yes - Bioavid Products

Does this report include data about the performance in processed food? >> Yes - RIDASCREEN® Products; Yes - Bioavid Products

Do you provide information about changing standard materials and antibodies (batch number) to your customers?

Contact information R-Biopharm:

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An der neuen Bergstraße 17
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email: <u>info@r-biopharm.de</u> URL: <u>www.r-biopharm.com</u>

Detailed information provided by RomerLabs:

Kit	AgraQuant® Almond	AgraQuant® Beta- lactoglobulin	AgraQuant® Casein	AgraQuant® Cashew
Product Line	AgraQuant®	AgraQuant®	AgraQuant®	AgraQuant®
Catalogue No.	COKAL0748	COKAL1048	COKAL1200	COKAL3148
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA (20+20+20 min incubations) quantitative			
Antibody Specificity / Target Protein	Polyclonal antibodies specific for whole almond	Polyclonal antibodies specific for beta-lactoglobulin	Polyclonal antibodies specific for casein	Polyclonal antibodies specific for whole cashew
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg almond/kg food	mg beta/lactoglobulin/kg food	mg casein/kg food	mg cashew/kg food
Limit of Detection (mg/kg)	0.2	0.0015	0.04	0.2
Limit of Quantification (mg/kg)	0.4	0.010	0.2	2
Standard Composition (e.g. isolated protein from xxx)	-	-	-	-
Cross Reactivity	Apricot kernel 100%, cherry kernel 1.7%, peach kernel 16%, plum kernel 1%, mahaleb cherry kernel 1.4%, chia seeds 0.0003% and sweet red pepper seeds 0.0004%	Casein <0.02%, ewe's milk <0.2%, goat's milk <0.002%	Ewe's casein 1.2%, goat's milk 1.1% and soy protein isolate 0.00004%	Pistachio 4%, pink peppercorn 1.5%, hazelnut 0.001% and walnut 0.001%
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.

Kit	AgraQuant® Crustacea	AgraQuant® Egg White	AgraQuant® Fish	AgraQuant® Gluten G12™
Product Line	AgraQuant®	AgraQuant®	AgraQuant®	AgraQuant®
Catalogue No.	COKAL2248	COKAL0848	COKAL2548	COKAL0200
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA (20+20+20 min incubations) quantitative	Sandwich ELISA (20+20+20 min incubations) quantitative	Sandwich ELISA (20+20+20 min incubations) quantitative	Sandwich ELISA (20+20+20 min incubations) quantitative
Antibody Specificity / Target Protein	Polyclonal antibodies specific for tropomyosin	Polyclonal antibodies specific for ovalbumin and ovomucoid	for cod parvalbumin	Monoclonal antibodies specific for 33-mer peptide
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg tropomyosin/kg food	mg egg white powder/kg food	mg cod/kg food	mg gluten/kg food
Limit of Detection (mg/kg)	0.0009	0.05	1.4	2
Limit of Quantification (mg/kg)	0.020	0.4	4	4
Standard Composition (e.g. isolated protein from xxx)	-	-	-	-
Cross Reactivity	Cockroach (protein) 0.01%	Raw chicken meat 0.001%	Eel 5.7%, flounder 13.5%, perch 93.1%, trout 18.6%, pike 85.3%, herring (smoked) 1.5%, carp 79.6%, salmon 2.6%, mackerel (smoked) 0.4%, red mullet 58.9%, shark catfish 29.5%, redfish 2.8%, samlet 19.6%, sardine 7%, haddock 53.4%, plaice 28.9%, swordfish 0.2%, oalfish 31%, devilfish 1.1%, sole 2.8%, spined loach 6.3%, turbot 2.5%, tuna 0.8%, catfish 168%, bass 46.9% and zander 30.2%	
Approval (e.g. AOAC or certification e.g. FDA)				AOAC Performance Tested Method
Remarks	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.

Kit	AgraQuant® Gluten	AgraQuant® HazeInut	AgraQuant® Lupin	AgraQuant® Lysozyme
Product Line	AgraQuant®	AgraQuant®	AgraQuant®	AgraQuant®
Catalogue No.	COKAL0248	COKAL0348	COKAL1548	COKAL2848
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA (20+20+20 min incubations) quantitative			
Antibody Specificity / Target Protein	Polyclonal antibodies specific for gliadin	Polyclonal antibodies specific for whole hazelnut	Polyclonal antibodies specific for whole lupin	Polyclonal antibodies specific for lysozyme
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg gluten/kg food	mg hazelnut/kg food	mg lupin/kg food	mg lysozyme/kg food
Limit of Detection (mg/kg)	0.6	0.3	0.2	0.002
Limit of Quantification (mg/kg)	4	1	2	0.025
Standard Composition (e.g. isolated protein from xxx)	-	-	-	-
Cross Reactivity	Barley 5%, oat 0.028%, rye 100%, triticale 4% and wheat 100%	Walnut 0.0022%	Chickpea 0.0003%, lentil 0.0004%, soy flour (unroasted) 0.07%, soy flour (roasted) 0.0009% and soy lecithin 0.002%	Conalbumin 0.0001%, total egg white protein 2.2%, ovalbumin 0.0001% and ovomucoid 0.0001%
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.

Kit	AgraQuant® Milk	AgraQuant® Mustard	AgraQuant® Ovalbumin	AgraQuant® Peanut
Product Line	AgraQuant®	AgraQuant®	AgraQuant®	AgraQuant®
Catalogue No.	COKAL2448	COKAL2148	COKAL2948	COKAL0148
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA (20+20+20 min incubations) quantitative			
Antibody Specificity / Target Protein	Polyclonal antibodies specific for casein and beta-lactoglobulin	Polyclonal antibodies specific for yellow mustard	Polyclonal antibodies specific for ovalbumin	Polyclonal antibodies specific for whole peanut
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg milk protein/kg food	mg mustard/kg food	mg ovalbumin/kg food	mg peanut/kg food
Limit of Detection (mg/kg)	0.005	1	0.004	0.1
Limit of Quantification (mg/kg)	0.4	2	0.025	1
Standard Composition (e.g. isolated protein from xxx)	-	-	-	-
Cross Reactivity	Ewe's milk 0.94% and goat's milk 0.01%	Black mustard 50%, brown mustard 59%, charlock mustard 48% and rapeseed 59%	Conalbumin <0.2%, egg white protein (total) 75%, lysozyme <0.02% and ovomucoid <0.02%	Fenugreek 0.00015%, gum arabic 0.003%, soy flour 0.0002%
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.

Kit	AgraQuant® Pistachio	AgraQuant® Sesame	AgraQuant® Soy	AgraQuant® Walnut
Product Line	AgraQuant®	AgraQuant®	AgraQuant®	AgraQuant®
Catalogue No.	COKAL2748	COKAL1948	COKAL0448	COKAL0948
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA (20+20+20 min incubations) quantitative			
Antibody Specificity / Target Protein	Polyclonal antibodies specific for whole pistachio	Polyclonal antibodies specific for whole sesame	Polyclonal antibodies specific for soy-trypsin-inhibitor (STI)	Polyclonal antibodies specific for whole walnut
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg pistachio/kg food	mg sesame/kg food	mg soya tripsin inhibitor/kg food	mg walnut/kg food
Limit of Detection (mg/kg)	0.13	0.2	0.016	0.35
Limit of Quantification (mg/kg)	1	2	0.040	2
Standard Composition (e.g. isolated protein from xxx)	-	-	-	-
Cross Reactivity	Cashew 12%, hazelnut 0.17%, pecan nut 0.0005%, sunflower seed 0.0002% and walnut 0.0008%	Black sesame 30%, cayenne pepper 0.0006%, chia seeds 0.36%, oats 0.0003%, onion 0.0007% and sunflower seeds 0.0003%		Cashew 0.0002%, chicken 0.0002% and pecan nut 0.0005%
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.

Kit	AgraQuant® Plus Almond	AgraQuant® Plus Casein	AgraQuant® Plus Cashew	AgraQuant® Plus Egg
Product Line	AgraQuant® Plus	AgraQuant® Plus	AgraQuant® Plus	AgraQuant® Plus
Catalogue No.	COKAL0748F	COKAL1248F	COKAL3148F	COKAL1848F
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA (20+20+20 min incubations) quantitative	Sandwich ELISA (10+10+10 min incubations) quantitative	Sandwich ELISA (10+10+10 min incubations) quantitative	Sandwich ELISA (10+10+10 min incubations) quantitative
Antibody Specificity / Target Protein	Polyclonal antibodies specific for whole almond	Polyclonal antibodies specific for casein	Polyclonal antibodies specific for whole cashew	Polyclonal antibodies specific for whole egg powder
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg almond/kg food	mg casein/kg food	mg cashew/kg food	mg whole egg powder/kg food
Limit of Detection (mg/kg)	0.5	0.2	1	0.5
Limit of Quantification (mg/kg)	1	1	1	1
Standard Composition (e.g. isolated protein from xxx)	-	-	-	-
Cross Reactivity	Apricot kernel 100%, chickpea (raw) 0.0003%, peanut (raw) 0.0001%, pecan (raw) 0.0002%, coconut (raw) 0.0001% and rice (wild/parboiled mix, raw) 0.0007%	Legume mix (raw) 0.0003%	Legume mix (raw) 0.0001%, pumpkin 0.0001%, almond 0.0001%, almond (roasted) 0.0002%, hazelnut 0.0001%, soybean 0.00013%, brazil nut 0.0006%, walnut 0.0003%, linseed 0.0003%, pecan 0.0001%, chickpea 0.0002%, pea (green) 0.0001%, pistachio 0.02%, red pepper 5.1% and pink peppercorn 0.97%	Poppy seed (grey) 10%
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.

Kit	AgraQuant® Plus Hazelnut	AgraQuant® Plus Macadamia nut	AgraQuant® Plus Mustard	AgraQuant® Plus Peanut
Product Line	AgraQuant® Plus	AgraQuant® Plus	AgraQuant® Plus	AgraQuant® Plus
Catalogue No.	COKAL0348F	COKAL1648F	COKAL2148F	COKAL0148F
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA (10+10+10 min incubations) quantitative			
Antibody Specificity / Target Protein	Polyclonal antibodies specific for whole hazelnut	Polyclonal antibodies specific for whole macadamia	Polyclonal antibodies specific for yellow, black and brown mustard	Polyclonal antibodies specific for whole peanut
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg hazelnut/kg food	mg mustard/kg food	mg casein/kg food	mg peanut/kg food
Limit of Detection (mg/kg)	1	1	0.5	0.5
Limit of Quantification (mg/kg)	1	1	1	1
Standard Composition (e.g. isolated protein from xxx)	-	-	-	-
Cross Reactivity	Sunflower seeds 0.0003%, poppy seeds 0.0003%, coconut 0.0004%, linseed 0.0008%, walnut >30% and pecan nut >30%	fish mix (raw) 0.0001%, green pea (raw) 0.0003%, grey poppy seed (raw) 0.0004%, brazil nut (raw) 0.0002%, rye flour 0.0002% and legume mix (raw) 0.0003%	Rape seeds 100%	Pecan nut 0.0015%, pine nut 0.0009%, soybean 0.0001% and sunflower seeds 0.0001%
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.

Kit	AgraQuant® Plus Pistachio	AgraQuant® Plus Sesame	AgraStrip® Almond	AgraStrip® Beta- lactoglobulin
Product Line	AgraQuant® Plus	AgraQuant® Plus	AgraStrip®	AgraStrip®
Catalogue No.	COKAL2748	COKAL1948	COKAL0710AS	COKAL1010AS
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Sandwich ELISA (10+10+10 min incubations) quantitative	Sandwich ELISA (10+10+10 min incubations) quantitative	Lateral Flow Strips (11 min assay) qualitative	Lateral Flow Strips (11 min assay) qualitative
Antibody Specificity / Target Protein	Polyclonal antibodies specific for whole pistachio	Polyclonal antibodies specific for whole sesame	Polyclonal antibodies specific for whole almond	Polyclonal antibodies specific for beta-lactoglobulin
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg pistachio/kg food	mg sesame/kg food	mg almond/kg food	mg beta-lactoglobulin/kg food
Limit of Detection (mg/kg)	1	1	2	0.5
Limit of Quantification (mg/kg)	1	1	2	0.5
Standard Composition (e.g. isolated protein from xxx)	-	-	-	-
Cross Reactivity	Soybean 0.0001%, brazil nut 0.0001%, walnut 0.0002%, buckwheat 0.0002%, hazelnut (roasted) >0.002%, cashew 18% and red pepper 6.9%	Apricot kernel 0.0002%, cashew 0.0002%, legume mix 0.0006%, linseed 0.0005%, pecan 0.0001%, poppy seed 0.0001%, pumpkin seed 0.0003%, sunflower seeds, 0.0008%, hazelnut 0.0002% and hazelnut (roasted) <0.005%	none reported	Kappa-casein
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.

Kit	AgraStrip® Brazil nut	AgraStrip® Casein	AgraStrip® Cashew/Pistachio	AgraStrip® Crustacea
Product Line	AgraStrip®	AgraStrip®	AgraStrip®	AgraStrip®
Catalogue No.	COKAL1710AS	COKAL1210AS	COKAL1310AS	COKAL2210AS
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Lateral Flow Strips (11 min assay) qualitative			
Antibody Specificity / Target Protein	Polyclonal antibodies specific for brazil nut	Polyclonal antibodies specific for casein	Polyclonal antibodies specific for cashew	Polyclonal antibodies specific for crustacea
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg brazil nut/kg food	mg casein/kg food	mg cashew-pistachio/kg food	mg dry crustacea/kg food
Limit of Detection (mg/kg)	5	1	2	2
Limit of Quantification (mg/kg)	5	1	2	2
Standard Composition (e.g. isolated protein from xxx)	-	-	-	-
Cross Reactivity	none reported	none reported	none reported	slight cross-reactivity to squid
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.

Kit	AgraStrip® Egg	AgraStrip® Gluten G12™	AgraStrip® Gluten	AgraStrip® HazeInut
Product Line	AgraStrip®	AgraStrip®	AgraStrip®	AgraStrip®
Catalogue No.	COKAL1810AS	COKAL0200AS	COKAL0210AS	COKAL0310AS
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Lateral Flow Strips (11 min assay) qualitative			
Antibody Specificity / Target Protein	Polyclonal antibodies specific for whole egg powder	Monoclonal antibodies specific for 33-mer peptide	Polyclonal antibodies specific for gliadin	Polyclonal antibodies specific for whole hazelnut
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg whole egg powder/kg food	mg gluten/kg food	mg gluten/kg food	mg hazelnut/kg food
Limit of Detection (mg/kg)	2	4	5	5
Limit of Quantification (mg/kg)	2	4	5	5
Standard Composition (e.g. isolated protein from xxx)	-	-	-	-
Cross Reactivity	nonce reported	Barley, rye and triticale	Barley, rye and triticale	Pecan and walnut (slight)
Approval (e.g. AOAC or certification e.g. FDA)		AOAC OMA certificate		
Remarks	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.

Kit	AgraStrip® Lupin	AgraStrip® Macadamia nut	AgraStrip® Milk	AgraStrip® Mustard
Product Line	AgraStrip®	AgraStrip®	AgraStrip®	AgraStrip®
Catalogue No.	COKAL1510AS	COKAL1610AS	COKAL2410AS	COKAL2110AS
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Lateral Flow Strips (11 min assay) qualitative			
Antibody Specificity / Target Protein	Polyclonal antibodies specific for whole lupin	Polyclonal antibodies specific for whole macadamia	Polyclonal antibodies specific for casein and beta-lactoglobulin	Polyclonal antibodies specific for blawn, brown and yellow mustard
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg lupin/kg food	mg macadamia/kg food	mg milk protein/kg food	mg mustard/kg food
Limit of Detection (mg/kg)	10	2	1	2
Limit of Quantification (mg/kg)	10	2	1	2
Standard Composition (e.g. isolated protein from xxx)	-	-	-	-
Cross Reactivity	none reported	Rye	none reported	Rape seed and wheat flour (due to rape seed contamination)
Approval (e.g. AOAC or certification e.g. FDA)				,
Remarks	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.	Validation report available for all Romer Labs kits. The report includes data about the performance in processed foods and common matrices. Any change in standard materials or antibodies is informed to the customers.

Kit	AgraStrip® Peanut	AgraStrip® Sesame	AgraStrip® Soy	AgraStrip® Walnut
Product Line	AgraStrip®	AgraStrip®	AgraStrip®	AgraStrip®
Catalogue No.	COKAL0110AS	COKAL1910AS	COKAL0410AS	COKAL0910AS
Methodology / Assay principle (e.g. sandwich ELISA or competitive or other (please describe))	Lateral Flow Strips (11 min assay) qualitative	Lateral Flow Strips (11 min assay) qualitative	Lateral Flow Strips (11 min assay) qualitative	Lateral Flow Strips (11 min assay) qualitative
Antibody Specificity / Target Protein	Polyclonal antibodies specific for whole peanut	Polyclonal antibodies specific for whole sesame	Monoclonal antibodies specific for whole soy	Polyclonal antibodies specific for whole walnut
Result expressed in (e.g mg total protein/kg food or mg allergenic commodity/kg food)	mg peanut/kg food	mg sesame/kg food	mg soy/kg food	mg walnut/kg food
Limit of Detection (mg/kg)	1	5	2	10
Limit of Quantification (mg/kg)	1	5	2	10
Standard Composition (e.g. isolated protein from xxx)	-	-	-	-
Cross Reactivity				
Approval (e.g. AOAC or certification e.g. FDA)				
Remarks				

Additional information RomerLabs:

Do you develop your kits according to DIN EN 15633-1?

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Has your company any certification concerning the production of kits?

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Do you provide a validation report?

>>

Does this report include data about the performance in processed food?

>>

Do you provide information about changing standard materials and antibodies (batch number) to your customers?

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Contact information RomerLabs:

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