Food & Allergy Consulting & Testing Services

the go-to-company for peace of mind

TESTING CATALOGUE

ALLERGEN RESIDUE DETECTION

ELISA METHODS (QUANTITATIVE)

ALLERGEN	EXPRESSED AS	RANGE OF QUANTIFICATION	LEAD TIME**
*Total Milk	Total Milk	2.5 – 25.0 ppm	5 - 7
Whey	β-Lactoglobulin *Possible cross-reaction to hemp seeds.*	0.5 - 13.5 ppm	5 - 7
Casein	Casein	0.5 - 13.5 ppm	10 - 14
*Egg	Egg	2.5 – 25 ppm	5 - 7
Egg	Egg	0.5 – 13.5 ppm	10 - 14
Lysozyme	Lysozyme	0.05 – 4.0 ppm	10 - 14
*Soya	Soya	2.5 - 25.0 ppm	5 - 7
Crustacean	Crustacean *Low levels of cross-reactivity reported to curcuma, mussels, mustard, beans and arthropods.*	20 - 160 ppm	10 - 14
*Gluten	Gluten	5 - 80 ppm	5 - 7
Hydrolysed Gluten	Hydrolysed Gluten	10 – 270 ppm	10 - 14
*Peanut	Peanut *Potential cross-reactivity to other legumes (chickpea, lima bean, lentils, fenugreek), green pea and wheat semolina.*	1.25 – 20 ppm	5 - 7
*Almond	Almond *Cross-reaction to apricot stone, mahaleb cherry and other plants from genus Prunus possible.*	2.5 – 20 ppm	5 - 7
Macadamia nut	Macadamia nut *Cross reactivities to green peas, kidney beans, pinto beans, white beans, poppy seeds, roasted almonds, cashew, roasted hazelnut, roasted peanuts, pecan nut, lentils and walnut have been observed.*	1.0 - 27.0 ppm	10 - 14
Mustard	Mustard *Antibodies cross-react with rapeseed (67%) and possibly with seeds of other Brassica spp. Cross reactivity to kidney beans, pinto beans, white beans and linseed also observed.*	0.5 – 13.5 ppm mustard	10 - 14
Sesame seed	Sesame	2.5 – 20 ppm sesame	10 – 14

PCR METHODS (QUALITATIVE)

ALLERGEN	EXPRESSED AS	LIMIT OF DETECTION	LEAD TIME**
Crustacean	Crustacean	<0.01% crustacean DNA	10 - 14
Wheat	Wheat	< 50 pg genomic DNA	10 - 14
Rye	Rye	< 50 *pg* rye DNA	10 - 14
*Fish	Fish *Cross reactivity was observed with DNA extracts from muscovy duck (Cairina moschata).*	0.4 ppm fish DNA	10 - 14
Cashew nut	Cashew	0.4 ppm cashew DNA	10 - 14
Hazelnut	Hazelnut	1.0 ppm Hazelnut DNA	10 - 14
Pecan nut	Pecan nut	4.0 ppm pecan DNA	10 - 14
Pistachio nut	Pistachio nut	0.4 ppm pistachio DNA	10 - 14
Walnut	Walnut	1.0 ppm walnut DNA	10 – 14
*Celery	Celery	0.4 ppm celery DNA	10 - 14
*Mustard	Mustard	0.4 ppm mustard DNA	10 - 14
Mollusc	Mollusc	0.4 ppm mollusc DNA	10 - 14

All above methods can be performed on surface swabs and air plates. It is important to note that all swab results are qualitative, regardless of the method, and that the lab is not accredited for any swab analyses.

QUALITATIVE ANIMAL SPECIES DETECTION

Species-specific - detection in mixed ingredient commodities (detection of adulteration)

** SANAS accredited methods* ** Working days

ANIMAL SPECIES	METHOD	SPECIFICITY	LIMIT OF DETECTION	LEAD TIME**
DNA-based screening for 24 animal species: **Cattle (Beef, Bison) Water buffalo, Pork, Sheep, Goat, Equine (Horse, Donkey), Hare, Rabbit, Chicken, Turkey, Goose, Mallard Duck, Muscovy Duck, Pheasant, Ostrich, Kangaroo, Springbok, Fallow Deer, Red Deer, Canine, Cat, Camel, Reindeer and Roe Deer**	PCR-microarray *Any product / derivative from the 24 species listed (e.g. milk from cow / gelatin from pork) will be detected.*	Animal specific DNA *Weak cross reactivity of the capture probe for Reindeer with pure Red Deer and vice versa can occur at high target concentrations.*	0.1 – 0.5% (*matrix dependent*)	10 - 14

ANIMAL SPECIES IDENTIFICATION

DNA sequencing for species identification in single species commodities

ANIMAL SPECIES	METHOD	LEAD TIME**
Animal and Fish species *Please enquire*	DNA sequencing *Not suitable for products containing more than one species – please enquire.*	10 - 14

MICROSCOPIC ANALYSIS

METHOD	EXAMPLE	LEAD TIME**
Microscopic detection of particles in herbs and spices for the identification of adulterants and confirmation of authenticity	Allspice , Annatto , Basil Leaves , Bay Leaves , Bun spice , Capsicum , Cocoa powder , Tomato Pomace , Cardamom , Caraway , Celery Seeds , Cinnamon, Cloves , Celery Coriander , Cilantro , Cumin Seeds Curry leaves , Fenugreek Seeds , Garlic powder, Ginger, Marjoram , Mustard Seeds , Nutmeg , Mint Oregano , Paprika , Parsley , Pepper (Black & White) , Rosemary , Saffron , Sage , Sesame seeds , Thyme, Turmeric, etc. PLEASE ENQUIRE IF THE HERB/SPICE YOU NEED TO AUTHENTICATE IS NOT LISTED ABOVE.	10 – 14
Microscopic assessment of crystalline ingredients	Salt, Sugar and Dextrose	10 -14
Microscopic detection of starch particles	Maize and Wheat Starch	10 -14
Microscopic assessment of all other samples	Onion powder, Tea, Whey powder, Bone meal, Cheese, Glass etc.	10-14

FACTS KITS

FACTS supply below kits for allergen control validation purposes. The intent is that samples are submitted to the FACTS laboratory for analyses by means of one of the above stated methods.

KIT	PURPOSE
FACTS Environmental Surface swab kit	The kit provides all the materials required for the collection of a surface swab sample for the detection of allergenic residues by means of ELISA or PCR.
FACTS Air plates	The passive aerial allergen contamination estimation kit provides all the materials required for the collection of environmental dust samples, from which the content of allergenic cross contamination can be estimated.

RAPID KITS

Various rapid systems are available for onsite screening of rinse water, surface swabs, ingredients and finished products. It is important to note that when using a rapid kit for ingredient and product testing it is important to ensure that the system is validated for the specific matrix. *FACTS offer sample matrix validation services.*

PLEASE REFER TO WWW.FACTSSA.COM (OUR SERVICES) FOR MORE INFORMATION.

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