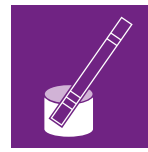


PRODUCT FOCUS



AgraStrip®

Allergens - Lateral Flow Devices

► AgraStrip® Allergen Test Kits available

Kit	Order number
AgraStrip® Almond Kit	COKAL0710AS
AgraStrip® β-Lactoglobulin Kit	COKAL1010AS
AgraStrip® Brazil Nut Kit	COKAL1710AS
AgraStrip® Casein Kit	COKAL1210AS
AgraStrip® Cashew/Pistachio Kit	COKAL1310AS
AgraStrip® Coconut Kit	COKAL2610AS
AgraStrip® Crustacea Kit	COKAL2210AS
AgraStrip® Egg Kit	COKAL1810AS
AgraStrip® Gluten Kit	COKAL0210AS
AgraStrip® Gluten G12 Kit	COKAL0200AS
AgraStrip® Hazelnut Kit	COKAL0310AS
AgraStrip® Lupin Kit	COKAL1510AS
AgraStrip® Macadamia Nut Kit	COKAL1610AS
AgraStrip® Milk Kit	COKAL2410AS
AgraStrip® Mustard Kit	COKAL2110AS
AgraStrip® Peanut Kit	COKAL0110AS
AgraStrip® Sesame Kit	COKAL1910AS
AgraStrip® Soy Kit	COKAL0410AS
AgraStrip® Walnut Kit	COKAL0910AS

The **AgraStrip® Allergen Test Kits** are immunological rapid test in lateral flow format for the detection of allergens in food, rinse waters and environmental swabs. Lateral flow devices are a very fast and easy to use on-site detection method for traces of food allergens. The AgraStrip® tests form a system allowing on-site detection of multiple food allergens.

Competitive Advantages

Fast – 11 minutes time to result

Sensitive – LOD in low ppm*

Stable – 12 months shelf life at room temperature

Cost Effective – 10 single sample tests

User friendly – ready to use components, no additional equipment needed

*see validation data for more details

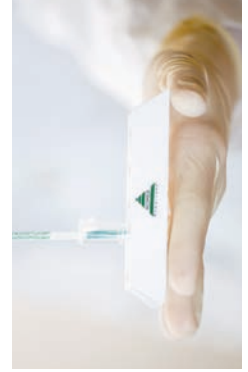
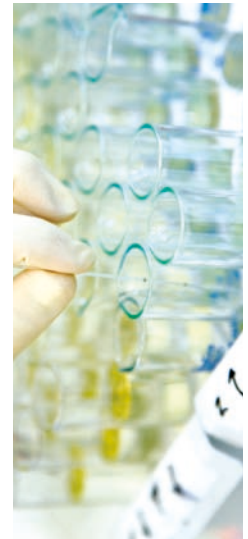


Validation data of AgraStrip® Allergen Test Kits - Overview

	Almond	β-Lactoglobulin	Brazil Nut	Casein	Cashew Pistachio	Coconut	Crustacea	Egg	Gluten	Gluten G12	Hazelnut
											
Limit of Detection	2 ppm almond	0.5 ppm β-Lactoglobulin	5 ppm brazil nut	1 ppm casein	2 ppm cashew 2 ppm pistachio	10 ppm coconut	10 ppm crustacea (wet)	2 ppm dried whole egg	4 ppm gluten	5 ppm gluten	5 ppm hazelnut
Specificity	no cross-reactivity with samples tested	κ-Casein, β-Lactoglobulin	no cross-reactivity with samples tested	no cross-reactivity with samples tested	no cross-reactivity with samples tested	no cross-reactivity observed	100 % squid	no cross-reactivity with samples tested	cross-reactivity with rye and barley	cross-reactivity with rye, spelt, barley and some oat varieties	slight cross-reactivity with pecan nut and walnut
LOD in spiked Commodities	1 ppm protein (5 ppm almond)	-	2 ppm protein (14.2 ppm brazil nut)	1 ppm casein	1 ppm protein (5 ppm cashew) 2 – 5 ppm pistachio protein (9.4 – 23.5 ppm pistachio)	detection of 1 ppm protein (15.2 ppm coconut) with all spiked commodities tested	1 ppm protein (7.1 ppm Crustacea)	1 ppm protein (2.5 ppm dried whole egg)	detection of 5 ppm gluten with all spiked commodities testes	5 ppm gluten (10 ppm with chocolate)	1 ppm protein (8 ppm hazelnut)
Rinse water	neutral pH needed	-	neutral pH needed	neutral pH needed	neutral pH needed	variation in pH (5 – 9) does not affect results	-	neutral pH needed	possibility of false positive results with low pH samples (<pH2)	variation in pH (5 – 9) does not affect result	neutral pH needed
Swabbing Recovery (plastic and stainless steel)	0.2 µg protein	-	0.4 µg protein	0.4 µg protein	0.4 µg protein	recovery of 0.2 µg coconut protein (3.0 µg coconut) from plastic and stainless steel surfaces	0.2 µg protein	0.2 µg protein	recovery of 4 µg from plastic and stainless steel surfaces	4 µg protein	0.2 µg protein

Validation data of AgraStrip® Allergen Test Kits - Overview

	Lupin	Macadamia Nut	Milk	Mustard	Peanut	Sesame	Soy	Walnut
Limit of Detection	10 ppm lupin	2 ppm macadamian nut	1 ppm milk protein	2 ppm mustard	1 ppm peanut	5 ppm sesame	2 ppm soy	10 ppm walnut
Specificity	no cross-reactivity with samples tested	no cross-reactivity with samples tested	Casein, β -Lactoglobulin	cross-reactivity with wheat flour	slight cross-reactivity with green peas, white beans, soy beans	no cross-reactivity with samples tested	cross reactivity with black and giant beans	cross-reactivity with pecan nuts
LOD in spiked Commodities	-	0.5 – 2 ppm protein (5.5 – 21.8 ppm macadamia)	-	2 – 20 ppm protein (6 – 60 ppm mustard)	1 ppm protein (4 ppm peanut)	0.5 – 5 ppm protein (2.8 – 27.5 ppm sesame)	detection of 1 ppm protein (2.7 ppm soy) with all spiked commodities tested	20 – 40 ppm walnut
Rinse water	neutral pH needed	neutral pH needed	-	neutral pH needed	neutral pH needed	neutral pH needed	variation in pH (5 – 9) does not affect result	neutral pH needed
Swabbing Recovery (plastic and stainless steel)	-	0.2 μ g protein	-	1 μ g protein	0.2 μ g protein	0.2 μ g protein (plastic) 0.4 μ g protein (stainless steel)	recovery of 0.09 μ g soy protein (2.4 μ g soy) from plastic and stainless steel surfaces	20 μ g walnut (plastic) 50 μ g walnut (stainless steel)



ROMER

Assay Principles

Immunological rapid test in lateral flow format for the detection of allergens in food, rinse waters and swab samples (environmental samples). The extracted sample is transferred to an incubation vial that contains specific ready-to-use antibodies. If the sample contains the allergen, an antigen-antibody complex will form. This is subsequently detected by means of the test strip. Resulting in a visible testline.

Hook-Effect

If more than 1 % of allergen (10 000 ppm) is present in the sample then this can lead to a false negative result! Therefore the test is designed for detection of allergen traces.

Sampling

Consideration must be taken that the food may contain an uneven distribution of allergens (spot contamination). It is important to test a representative portion of food as only a small amount of material is tested with the AgraStrip® Allergen test. So far there are no official regulations on sampling for food allergen testing. One reason for this is the different nature of samples for food allergens as they can vary from solid, dry powders to viscous and liquid form. A different approach is necessary for each type of sample matrix.

Affordability and ease of use of the AgraStrip® Allergen kits allow that more samples can be taken and tested than in the past. This helps to identify these hot spots of contamination, thereby also reducing some of the largest variances in testing which arise from sampling and reduce the potential risk to consumers of hidden food allergens.

Swabbing

The AgraStrip® Allergen Kit contains swabs for environmental sample collection.

Each Testkit includes*:

- Package Insert
- Certificate of Performance
- 10 strip tests in tube
- 1 Dropper Bottle containing 35 ml Extraction Solution
- 10 Extraction Tubes and Caps
- 10 Incubation Vials with ready to use antibodies
- 10 Extraction Tube dropper tips
- 10 Swabs
- 1 stand for incubation vials

*Test kit composition and procedure for AgraStrip® Gluten and for AgraStrip® Gluten G12 varies.

NOTE: Please consult Package Inserts for detailed procedures, as they might vary slightly.

Most products of the AgraStrip® Allergen Kit range were developed in cooperation with ifp (www.produktqualitaet.com)

