



# Allergen analysis of food and surfaces with sensitive test kits

Even small traces of allergenic proteins in food can provoke allergic reactions in sensitive people. Therefore monitoring of cross-contamination in raw material and production lines as well as correct labeling of food products are an important part of quality control in the food industry.

## Surface and hygiene control

Clean and controlled allergen production conditions are a prerequisite for allergen-free food products. Therefore, swabs within production sites should be carried out regularly with test strips from bioavid or RIDA®QUICK. The RIDA®QUICK Gliadin has received validation according to AOAC-OMA (“Official Methods of Analysis”) for the analysis of corn products and AOAC-PTM (*Performance Tested Methods<sup>SM</sup>*) for surfaces and cleansing waters. No lab equipment is required and results from these rapid tests are available within 5 - 10 minutes.

## Product testing

For food testing, different analytical methods exist: ELISA, LFD and PCR. While ELISA and LFD detect proteins, PCR detects DNA. These methods are complementary and can be used for confirmation of screening results. The unique 4Plex Allergen qPCR kits allow the detection of 3 parameters plus internal amplification control in one run. Many of the ELISA kits are next to manually use also suitable for automation.



### bioavid/RIDA® QUICK

- On-site testing (swab test, food)
- Simple
- No lab equipment required
- Rapid yes/no decision
- Suitable for food after own validation



### RIDASCREEN® ELISA

- Quantitative results using certified calibration material (e.g. NIST CRM)
- Simple sample preparation (20 min) and test procedure (3 x 10 min)
- Possibility of using automates (ThunderBolt®, GEMINI)
- Evaluation with the user-friendly software – RIDASOFT® Win.NET



### SureFood® PCR

- Robust, stable target molecule (DNA) in highly processed food samples
- Highly specific assay with minimum tendency to cross-reactions
- One sample preparation using SureFood® PREP Advanced (S1053) for all parameters in 90 minutes
- Customized solutions
- Standardized handling and test procedure (1 - 2 hours)



## Allergens

### Gliadin/Gluten

Product	Description	No. of tests/amount	Art. No.
<b>ELISA microtiter plates</b>			
RIDASCREEN® Gliadin AOAC-OMA 2012.01 "Final Action" AOAC-RI 120601 AACCI 38-50.01 Codex Alimentarius Method (Type I) ICC	Official R5 Mendez method: sandwich ELISA to quantify prolamines from wheat, rye and barley in e.g. food declared as gluten-free; sample extraction with R7006 or R7016 (not contained in the kit); the kit is suitable for automation Detection limit: 0.5 mg/kg gliadin (0.1 - 1.2 depending on the matrix) resp. 1.0 mg/kg gluten	96 determinations Incubation time: 1 hr 30 min	R7001
RIDASCREEN®FAST Gliadin sensitive	R5 sandwich ELISA to quantify prolamines from wheat, rye and barley. For example, in food declared as gluten-free; sample extraction with Cocktail (patented) R7006/R7016 or R7080 (not contained in the kit); the kit is suitable for automation Detection limit: 0.2 mg/kg Gliadin (0.19 - 2.1 depending on the matrix) resp. 0.4 mg/kg Gluten	96 determinations Incubation time: 30 min	R7051
RIDASCREEN®FAST Gliadin	R5 sandwich ELISA to quantify prolamines from wheat, rye, barley in e.g. food declared as gluten-free; sample extraction with R7006/R7016 or R7080 (not contained in the kit); the kit is suitable for automation Detection limit: 0.5 mg/kg gliadin (0.14 - 2.1 depending on the matrix) resp. 1.0 mg/kg gluten	48 determination Incubation time: 30 min	R7002
RIDASCREEN® Gliadin competitive (2 <sup>nd</sup> generation) AACCI 38-55.01 AOAC-OMA 2105.05	R5 competitive ELISA to quantify potential toxic peptide sequences of prolamines from wheat, rye and barley in fermented and hydrolyzed food (e.g. beer, starch, starch syrup, malt extracts); sample preparation with an ethanolic solution; the standard material is a hydrolyzate (mixture of wheat, rye and barley); the results can be related to the limit values of the Codex Alimentarius; Detection limit: 2.3 mg/kg gliadin (1.9 - 2.6 depending on the matrix) resp. 4.6 mg/kg gluten	96 determinations Incubation time: 40 min	R7021
<b>ELISA – accessories</b>			
Cocktail (patented)	Developed by Prof. Mendez; officially recommended extraction buffer for all processed e.g. heat treated food samples in conjunction with R7001, R7002, R7051, R7003, R7004	105 ml	R7006
Cocktail (patented)	Corresponding to R7006 but larger bottle size	1000 ml	R7016
RIDA® Cocktail ECO	Alternative to the Cocktail (patented) (use only after extraction comparison with the Cocktail): the extraction is faster (35 min) and more environment-friendly; for all processed e.g. heat treated food tested with R7001, R7002, R7051, R7003, R7004	2 x 115 ml	R7080
RIDA® Extraction solution (colorless)	Alternative to the Cocktail (patented) (use only after extraction comparison with the Cocktail): the extraction is faster (35 min); for all processed e.g. heat treated food tested with R7001, R7002, R7051, R7003, R7004	105 ml	R7098
Set of 3 processed Gliadin Assay Controls	Three assay controls: one negative, two positive homogenized snack samples; in cooperation with Trilogy® Analytical Laboratories	3 x 1.5 g	R7012





## Allergens

### Gluten

Product	Description	No. of tests/amount	Art. No.
<b>Lateral flow test strips</b>			
RIDA®QUICK Gliadin AOAC-OMA 2015.16 "Final Action" AACCI AOAC-RI 101702	The immunochromatographic test is based on the R5 antibody and detects prolamines from wheat, rye and barley; the test strips can be used directly for swabs on surfaces or for analysis of e.g. gluten-free raw materials Detection limit: 1.6 - 3.0 µg gluten/100 cm <sup>2</sup> on surfaces, 4.4 mg/kg gluten in raw materials, 6.3 mg/kg gluten in processed food, cleaning/process water (without cleaner) 10 ng/ml gluten, (with cleaner) 50 - 100 ng/ml gluten	25 test strips in reclosable tube, 25 plastic pipettes, sample diluent (ready-to-use), 30 vials Incubation time: 5 min	R7003
RIDA®QUICK Gliadin (single packaged)	Corresponding to R7003, test strips are single packaged and no plastic pipettes are included	25 test strips single packed, sample diluent (ready-to-use), 30 vials	R7004
RIDA®QUICK Gliadin (ready to swab)	Corresponding to R7003, test strips are single packaged, prefilled vials with ready-to-use sample buffer are included	25 test strips single packed, 25 prefilled vials with ready-to-use buffer	R7005
<b>Real-time PCR – qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Gluten	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3606

\* SureFood® QUANTARD Allergen 40 must be used for quantification.



## Allergens

### Soya

Product	Description	No. of tests/amount	Art. No.
<b>ELISA microtiter plates</b>			
RIDASCREEN®FAST Soya	Sandwich ELISA to quantify traces of soy protein in native and processed food; the kit is suitable for automation Detection limit: 0.24 mg/kg (0.15 - 0.32 depending on the matrix)	48 determinations Incubation time: 30 min	R7102
<b>ELISA – accessories</b>			
Set of 3 processed Soya Assay Controls	Three assay controls: one negative, two positive homogenized snack samples In cooperation with Trilogy® Analytical Laboratories	3 x 2 g	R7132
<b>Reference material</b>			
MoniQA Reference Material - Blank (coming soon)	Milled cookie; free from gluten, soya, milk, egg, peanut, tree-nuts; negative control and/or matrix material as basis for spiked samples Prepared and packaged by Trilogy Analytical Laboratories	1 x 5 g	MQA 082015
MoniQA Soya Reference Material (coming soon)	Soya powder can be used as a positive control or as a spike material Prepared and packaged by Trilogy Analytical Laboratories	1 x 5 g	MQA 712018
<b>Lateral flow test strips</b>			
RIDA®QUICK Soya	Immunochromatographic test for the determination of soya on surfaces, also strongly heated soya samples were detected. It is recommended to use RIDA®QUICK Soya accessory pack (Z7103) for sample preparation. Detection limit: on surfaces approx. 0.5 µg soya protein/ 100 cm <sup>2</sup> , soya flour in wheat flour approx. 0.5mg/kg soya protein, in processed foods approx. 10 mg/kg soya protein (depending on the matrix). For the sample preparation, RIDA QUICK Soya accessory pack (Z7103) is recommended. For the sample preparation from foods, the Soya extraction buffer (R7113) should be used.	25 dip sticks in reclosable tube, Conjugate, Extraction buffer, 30 plastic tubes, 25 tubes, 26 swabs, 50 pipette tips Incubation time: 10 min	R7103
<b>RIDA®QUICK Soya – accessories</b>			
RIDA®QUICK Soya accessory pack	Accessories for the use of the RIDA®QUICK Soya	Test tube holder, floating rack, pipette	Z7103
RIDA®QUICK Soya Extraction buffer	The buffer is used for food sample preparation in conjunction with RIDA®QUICK Soya	2 x 100 ml	R7113
<b>Real-time PCR – qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Soya	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3601

\* SureFood® QUANTARD Allergen 40 must be used for quantification.



## Allergens

### Milk

Product	Description	No. of tests/amount	Art. No.
<b>ELISA microtiter plates</b>			
RIDASCREEN®FAST Milk AOAC-RI 101501	Sandwich ELISA to quantify milk proteins (casein and $\beta$ -lactoglobulin) in food containing traces of milk components; the assay is calibrated to NIST SRM 1549a whole milk powder; the kit is suitable for automation Detection limit: 0.7 mg/kg milk protein (0.3 - 0.8 depending on the matrix)	48 determinations Incubation time: 30 min	R4652
RIDASCREEN®FAST Casein	Sandwich ELISA to quantify casein in food containing traces of milk or casein/caseinates; the kit is suitable for automation Detection limit: extraction with Allergen extraction buffer for red wine, chocolate and ice tea powder 0.12 mg/kg casein (0.07 - 0.19 depending on the matrix); extraction with Extractor 2 for teff flour, biscuits and rice waffles 0.71 mg/kg casein (0.41 - 0.95 depending on the matrix)	48 determinations Incubation time: 30 min	R4612
RIDASCREEN®FAST $\beta$ -Lactoglobulin	Sandwich ELISA to quantify native and processed $\beta$ -lactoglobulin in food containing traces of milk or whey; the kit is suitable for automation Detection limit: 0.042 mg/kg $\beta$ -Lactoglobulin (0.024 - 0.073 depending on the matrix)	48 determinations Incubation time: 30 min	R4912
RIDASCREEN® $\beta$ -Lactoglobulin	Competitive ELISA to quantify native and processed $\beta$ -lactoglobulin in hydrolyzed milk products (e.g. hypoallergenic baby food) Detection limit: 1.4 mg/kg $\beta$ -lactoglobulin (0.9 - 2.1 depending on the matrix)	96 determinations Incubation time: 2 hrs 45 min	R4901
<b>ELISA – accessories</b>			
RIDA® Extractor 2	The RIDA® Extractor 2 (R4613) is used for the sample preparation in <ul style="list-style-type: none"> <li>• RIDASCREEN®FAST Milk (R4652)</li> <li>• RIDASCREEN®FAST Casein (R4612)</li> <li>• RIDASCREEN®FAST <math>\beta</math>-Lactoglobulin (R4912)</li> </ul>	30 ml concentrate, sufficient for 15 samples	R4613
<b>Lateral flow test strips</b>			
bioavid Lateral Flow Milch/Milk	Immunochromatographic tests for qualitative detection of milk proteins (casein and $\beta$ -Lactoglobulin) Detection limit: 1 mg/kg depending on the matrix	10 test strips 25 test strips Total assay time: 9 min	BL613-10 BL613-25
<b>Reference material</b>			
MoniQA Milk Reference Material – Blank	Milled cookie; free from gluten, milk, egg, soy, peanut, tree-nuts; can be used as negative control and/or matrix material as basis for spiked samples Prepared and packaged by Trilogy Analytical Laboratories	1 x 5 g	MQA 082015
MoniQA Milk Reference Material – SMP	Skim milk powder; can be used as a positive control or as a spike material Prepared and packaged by Trilogy Analytical Laboratories	1 x 5 g	MQA 092014
MoniQA Milk Reference Material – Low	Skim milk powder incurred in gluten free cookies, milled Prepared and packaged by Trilogy Analytical Laboratories	1 x 5 g	MQA 102016
MoniQA Milk Reference Material – High	Skim milk powder incurred in gluten free cookies, milled Prepared and packaged by Trilogy Analytical Laboratories	1 x 5 g	MQA 082016
Set of 4 MoniQA Reference controls – Blank, SMP, High, Low	Set includes pouch of MQA 082015, MQA 092014, MQA 102016, MQA 082016 Prepared and packaged by Trilogy Analytical Laboratories	4 x 5 g	MQA 122016





## Allergens

### Egg

Product	Description	No. of tests/amount	Art. No.
<b>ELISA microtiter plates</b>			
RIDASCREEN® Egg (coming soon)	Sandwich ELISA to quantify traces of processed egg in food; the assay is calibrated to NIST SRM 8445 whole egg powder Limit of quantification: 0.25 mg/kg whole egg powder	96 determinations Incubation time: 50 min	R6411
RIDASCREEN®FAST Ei/Egg Protein	Sandwich ELISA to quantify traces of native egg in food; the assay is calibrated to NIST SRM 8445 whole egg powder; the kit is suitable for automation Detection limit: 0.1 mg/kg whole egg powder (0.05 - 0.16 depending on the matrix), 0.03 mg/kg egg white protein	48 determinations Incubation time: 30 min	R6402
RIDASCREEN®FAST Lysozym	Sandwich ELISA to quantify traces of lysozyme in wine, cheese and sausage; the kit is suitable for automation Detection limit: 0.005 mg/kg lysozyme in wine, 0.011 mg/kg lysozyme in cheese and sausages	48 determinations Incubation time: 30 min	R6452
<b>Lateral flow test strips</b>			
bioavid Lateral Flow Ei/Egg	Immunochromatographic tests for qualitative detection of egg Detection limit: 1 mg/kg depending on matrix	10 test strips 25 test strips Total assay time: 8 min	BL608-10 BL608-25



### Nuts and similar

<b>Almond</b>			
<b>ELISA microtiter plates</b>			
RIDASCREEN®FAST Mandel/Almond	Sandwich ELISA to quantify traces of almond in food; the kit is suitable for automation Detection limit: 0.1 mg/kg almond (0 - 0.2 depending on the matrix)	48 determinations Incubation time: 30 min	R6901
<b>Lateral flow test strips</b>			
bioavid Lateral Flow Almond	Immunochromatographic tests for qualitative detection of almond Detection limit: 1 mg/kg depending on matrix	10 test strips 25 test strips Total assay time: 10 min	BL601-10 BL601-25
<b>Real-time PCR – qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Almond	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3604
<b>Brazil nut</b>			
<b>Lateral flow test strips</b>			
bioavid Lateral Flow Brazil nut	Immunochromatographic tests for qualitative detection of brazil nut Detection limit: 1 mg/kg depending on matrix	25 test strips Total assay time: 10 min	BL602-25
<b>Real-time PCR – qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Brazil nut	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3617
<b>Cashew kernel</b>			
<b>ELISA microtiter plates</b>			
RIDASCREEN®FAST Cashew	Sandwich ELISA to quantify traces of cashew in food; Detection limit: 0.13 mg/kg cashew (0.1 - 0.19 depending on the matrix)	48 determinations Incubation time: 30 min	R6872



\* SureFood® QUANTARD Allergen 40 must be used for quantification.



## Allergens

### Nuts and similar

Product	Description	No. of tests/amount	Art. No.
<b>Lateral flow test strips</b>			
bioavid Lateral Flow Cashew Kernel	Immunochromatographic tests for qualitative detection of cashew kernel Detection limit: 1 mg/kg depending on matrix	10 test strips 25 test strips Total assay time: 10 min	BL610-10 BL610-25
<b>Real-time PCR – qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Cashew	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3615
<b>Coconut</b>			
<b>Lateral flow test strips</b>			
bioavid Lateral Flow Coconut	Immunochromatographic tests for qualitative detection of coconut Detection limit: 1 mg/kg depending on matrix	10 test strips 25 test strips Total assay time: 10 min	BL600-10 BL600-25
<b>Hazelnut</b>			
<b>ELISA microtiter plates</b>			
RIDASCREEN®FAST Hazelnut	Sandwich ELISA to quantify traces of hazelnut in food; the kit is suitable for automation Detection limit: 0.19 mg/kg hazelnut (0.17 - 0.22 depending on the matrix)	48 determinations Incubation time: 30 min	R6802
<b>Lateral flow test strips</b>			
bioavid Lateral Flow Hazelnut	Immunochromatographic tests for qualitative detection of hazelnut Detection limit: 1 mg/kg depending on matrix	10 test strips 25 test strips Total assay time: 10 min	BL604-10 BL604-25
<b>Real-time PCR – qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Hazelnut	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3602
<b>Macadamia nut</b>			
<b>ELISA microtiter plates</b>			
RIDASCREEN®FAST Macadamia	Sandwich ELISA to quantify traces of macadamia in food Detection limit: 0.17 mg/kg (0.1 - 0.4 depending on the matrix)	48 determinations Total assay time: 30 min	R6852
<b>Lateral flow test strips</b>			
bioavid Lateral Flow Macadamia nut	Immunochromatographic tests for qualitative detection of macadamia nut Detection limit: 1 mg/kg depending on matrix	25 test strips Total assay time: 10 min	BL605-25
<b>Real-time PCR – qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Macadamia	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3616
<b>Pecan nut</b>			
<b>Real-time PCR – qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Pecan	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3618
<b>Peanut</b>			
<b>ELISA microtiter plates</b>			
RIDASCREEN®FAST Peanut AOAC-RI 030404	Sandwich ELISA to quantify traces of peanut in food; the assay is calibrated to NIST SRM 2387 peanut butter; the kit is suitable for automation Detection limit: 0.13 mg/kg peanut (0.04 - 0.2 depending on the matrix)	48 determinations Incubation time: 30 min	R6202
<b>Lateral flow test strips</b>			
bioavid Lateral Flow Peanut	Immunochromatographic tests for qualitative detection of peanut Detection limit: 1 mg/kg depending on matrix	10 test strips 25 test strips Total assay time: 10 min	BL606-10 BL606-25
<b>Real-time PCR – qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Peanut	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3603

\* SureFood® QUANTARD Allergen 40 must be used for quantification.





## Allergens

### Nuts and similar

Product	Description	No. of tests/amount	Art. No.
<b>Pistachio</b>			
<b>Lateral flow test strips</b>			
bioavid Lateral Flow Pistachio	Immunochromatographic tests for qualitative detection of pistachio Detection limit: 1 mg/kg depending on matrix	10 test strips 25 test strips Total assay time: 10 min	BL611-10 BL611-25
<b>Real-time PCR – qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Pistachio	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3614
<b>Walnut</b>			
<b>Lateral flow test strips</b>			
bioavid Lateral Flow Walnut	Immunochromatographic tests for qualitative detection of walnut Detection limit: 10 mg/kg depending on matrix	10 test strips 25 test strips Total assay time: 10 min	BL607-10 BL607-25
<b>Real-time PCR – qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Walnut	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3607

### Oil plants

<b>ELISA microtiter plates</b>			
RIDASCREEN®FAST Sesame	Sandwich ELISA to quantify traces of sesame in food Detection limit: 0.14 mg/kg sesame (0.08 - 0.2 depending on the matrix)	48 determinations Incubation time: 30 min	R7202
<b>Lateral flow test strips</b>			
bioavid Lateral Flow Sesam/Sesame	Immunochromatographic tests for qualitative detection of sesame Detection limit: 1 mg/kg depending on matrix	10 test strips 25 test strips Total assay time: 10 min	BL609-10 BL609-25
<b>Real-time PCR – qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Sesame	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3608

\* SureFood® QUANTARD Allergen 40 must be used for quantification.



## Allergens

### Fish/Crustacean/Seafood

Product	Description	No. of tests/amount	Art. No.
<b>ELISA microtiter plates</b>			
RIDASCREEN®FAST Crustacean	Sandwich ELISA to quantify traces of crustacean in food; the kit is suitable for automation Detection limit: 2 mg/kg crustacean (0.9 - 2.6 depending on the matrix)	48 determinations Incubation time: 30 min	R7312
<b>Lateral flow test strips</b>			
bioavid Lateral Flow Crustacean	Immunochromatographic tests for qualitative detection of crustacean Detection limit: 10 mg/kg depending on matrix	10 test strips 25 test strips Total assay time: 10 min	BL616-10 BL616-25
<b>Real-time PCR - qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Crustaceans	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3612
SureFood® ALLERGEN Fish	Detection limit: ≤ 1 mg/kg; limit of quantification: 4 mg/kg depending on matrix and DNA preparation	100 reactions*	S3610
SureFood® ALLERGEN Molluscs	Detection limit: ≤ 0.4 mg/kg, only qualitative, depending on matrix and DNA preparation	100 reactions	S3613



### Various

<b>Real-time PCR – qualitative DNA detection</b>			
SureFood® Oat	Detection limit: ≤ 500 DNA copies depending on the matrix and DNA preparation	100 reactions	S7004
SureFood® Buckwheat	Detection limit: ≤ 5 DNA copies depending on the matrix and DNA preparation	100 reactions	S7005
<b>Real-time PCR - qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Celery	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3605
<b>ELISA microtiter plates</b>			
RIDASCREEN®FAST Lupine	Sandwich ELISA to quantify traces of lupin in food Detection limit: 0.32 mg/kg lupin protein (0.1 - 0.7 depending on the matrix)	48 determinations Incubation time: 30 min	R6102
<b>Real-time PCR - qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Lupin	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3611
<b>ELISA microtiter plates</b>			
RIDASCREEN®FAST Senf/Mustard	Sandwich ELISA to quantify traces of mustard in food; the assay detects yellow, white, brown and black mustard Detection limit: 0.1 mg/kg mustard powder (0.08 - 0.11 depending on the matrix)	48 determinations Incubation time: 30 min	R6152
<b>Lateral flow test strips</b>			
bioavid Senf/Mustard	Immunochromatographic tests for qualitative detection of mustard Detection limit: 1 mg/kg depending on matrix	10 test strips 25 test strips Total assay time: 10 min	BL603-10 BL603-25
<b>Real-time PCR - qualitative and/or quantitative DNA detection</b>			
SureFood® ALLERGEN Mustard	Detection limit: ≤ 0.4 mg/kg; limit of quantification: 1 mg/kg depending on matrix and DNA preparation	100 reactions*	S3609



\* SureFood® QUANTARD Allergen 40 must be used for quantification.



## Allergens

### Real-time PCR – multiplex

Product	Description	No. of tests/amount	Art. No.
<b>Multiplex Screening</b>			
<b>Real-time PCR – qualitative DNA detection</b>			
SureFood® ALLERGEN 4plex Peanut/Hazelnut/Walnut + IAC	Detection limit: ≤ 1 mg/kg peanut ≤ 0,4 mg/kg hazelnut ≤ 0,4 mg/kg walnut; depending on matrix and DNA preparation	100 reactions	S3402
SureFood® ALLERGEN 4plex Soya/Celery/Mustard + IAC	Detection limit ≤ 0.4 mg/kg, depending on matrix and DNA preparation	100 reactions	S3401
SureFood® ALLERGEN 4plex Macadamia/Brazil nut/Pecan + IAC	Detection limit: < 0.4 mg/kg, depending on matrix and DNA preparation	100 reactions	S3403



### Accessories

<b>Real-time PCR</b>		<b>DNA preparation</b>	
SureFood® PREP Advanced	For highly processed matrices (food and feed)	50 preparations	S1053
<b>Real-time PCR</b>		<b>Laboratory reference material for quantification</b>	
SureFood® QUANTARD Allergen 40	Corn flour contains 12 potential allergens in food except sulphite and lactose with concentration of 40 mg/kg; the material has been developed for PCR quantification of allergens in food	2 grams	S3301
<b>Lateral Flow</b>		<b>Accessories</b>	
bioavid Wischtest Kit/Swabbing Kit	Swabbing kit with wood swabs for sampling of allergen residues on surface (e.g. production lines) for bioavid lateral flow kits	25 swabs, vials, pipettes, 10 ml buffer concentrate	BS800-25
bioavid Wischtest Kit/Swabbing Kit (Plastic)	Swabbing kit with single packed plastic swabs for sampling of allergen residues on surface (e.g. production lines) for bioavid test strips	25 swabs in two single packaged plastic bags, vials, pipettes, 10 ml buffer concentrate	BS801-25
bioavid Absorptionspuffer/Absorbent Buffer	Buffer for preparation of polyphenol containing and strongly colored samples (e.g. coffee, red wine) for bioavid lateral flow kits	25 vials (9 ml buffer each)	BS810-25
bioavid Probenpuffer/Sample Buffer	The buffer is particularly suitable for preparation of difficult samples (e.g. ketchup, mayonnaise, flour) for bioavid test strips	100 ml	BS815-100
<b>Service by bioavid</b>			
Laboratory service	Service for the validation of difficult food matrices	Approx. 1 week processing time	on request



## Allergens

Parameters	RIDA®QUICK bioavid	RIDASCREEN®	SureFood®	Enzytec™
	Lateral flow	ELISA	Real-time PCR	Enzymatic
Almond	●	●●	●	
Brazil nut	●		●	
Cashew kernel	●	●	●	
Casein		●●		
Celery			●●	
Coconut	●			
Crustacean	●	●●	●	
Egg	●	●●		
Fish			●	
Gliadin/gluten	●	●●	●	
Gliadin/gluten fragments		●		
Glutamic acid				●
Hazelnut	●	●●	●●	
Histamine		●		●●
β-Lactoglobulin		●●		
β-Lactoglobulin fragments		●		
Lactose				●
Lupine		●	●	
Lysozyme		●		
Macadamia	●	●	●●	
Milk	●	●●		
Molluscs			●	
Mustard	●	●	●●	
Peanut	●	●●	●●	
Pecan			●●	
Pistachio	●		●	
Sesame	●	●	●	
Soya	●	●●	●●	
Sulfite				●
Walnut	●		●●	

**Multiplex tests:**

- SureFood® ALLERGEN 4plex Soya/Celery/Mustard + IAC (Art. No. S3401)
- SureFood® ALLERGEN 4plex Peanut/Hazelnut/Walnut + IAC (Art. No. S3402)
- SureFood® ALLERGEN 4plex Macadamia/Brazil nut/Pecan + IAC (Art. No. S3403)
- ELISA is suitable for automation