



**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. It is 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 chairman of the WG.

**Updated information is available on:**

- Morinaga Institute of Biological Science [www.miobs.com](http://www.miobs.com)  
Suppliers: [www.crystalchem.com](http://www.crystalchem.com) / '  
ICS International Clinical Service: [www.ics-gmbh.de](http://www.ics-gmbh.de) (Germany)
- Neogen: [www.neogen.com](http://www.neogen.com)
- R-Biopharm AG [www.r-biopharm.com](http://www.r-biopharm.com)
- Romer Labs / Coring (Germany): [www.romerlabs.com](http://www.romerlabs.com) / [www.coring.de](http://www.coring.de)
- Transia: [www.transia.de](http://www.transia.de)

## Detailed information, provided by some suppliers of allergen test kits:

1. ELISA

|                    | Neogen Veratox Peanut  | Neogen Biokits Peanut  | Neogen Veratox Almond  | Neogen Veratox Hazelnut  | Neogen Biokits Walnut  | Neogen Biokits Sesame   |
|--------------------|--|--|--|--|--|---|
| Product group      | Nuts   |  |  |  |  | Sesame  |
| Extraction         | Homogenize, extract with pre-heated allergen extraction buffer & additive powder, centrifuge or filter | Homogenize, extract with pre-heated allergen extraction buffer, centrifuge or filter | Homogenize, extract with pre-heated allergen extraction buffer & additive powder, centrifuge or filter | Homogenize, extract with pre-heated allergen extraction buffer & additive powder, centrifuge or filter | Homogenize, extract with pre-heated allergen extraction buffer, centrifuge or filter | Homogenize, extract with allergen extraction buffer, centrifuge, dilute 1:49 in diluent |
| Methodology        | Quantitative Sandwich ELISA (10+10+10 minutes incubations)   | Quantitative sandwich ELISA. Total test incubation time 75 minutes.                  | Quantitative Sandwich ELISA (10+10+10 minutes incubations)   | Quantitative Sandwich ELISA (10+10+10 minutes incubations)   | Quantitative sandwich ELISA. Total test incubation time 75 minutes.                  | Quantitative sandwich ELISA. Total test incubation time 180 minutes.                    |
| Measuring Range    | 2.5-25 ppm peanut  | 1-20ppm peanut   | 2.5-25 ppm almond  | 2.5-25 ppm hazelnut  | 2.4-120ppm walnut  | 6.25-100ppm sesame  |
| Standards          | 2.5/5/10/25 ppm Standards prepared from a mixture of 22 varieties of raw and roasted peanuts           | 1/2/5/10/20 ppm  | 2.5/5/10/25 ppm  | 2.5/5/10/25 ppm Standards prepared from a mixture of raw and roasted hazelnuts                         | 2.4/6/12/60/120 ppm  | 10ppm/100ppm Standards to be prepared from 100ppm control as outlined in kit insert     |
| Limit of Detection | 1ppm   | 0.1ppm   | 1ppm   | 1ppm   | 0.25ppm  | 1 ppm   |
| Specificity        | Specific polyclonal antibodies to Peanut proteins  | Specific polyclonal antibodies to Conarachin (Ara h1)                                | Specific polyclonal antibodies to Almond proteins  | Specific polyclonal antibodies to Hazelnut proteins  | Specific polyclonal antibodies Walnut proteins                                       | Specific polyclonal antibodies Sesame proteins  |
| Number of Tests    | 48 well plate  | 96 well plate  | 48 well plate  | 48 well plate  | 48 well plate  | 48 well plate   |
| Approval           | AOAC –RI- 030403   | AOAC –RI- 030402   |  |  |  |   |
| Catalogue No.      | 8430   | 902048Q  | 8440   | 8420   | 902085J  | 902070X   |

|                    | Neogen<br>Veratox<br>Total milk  | Neogen<br>Veratox<br>Casein  | Neogen<br>Biokits<br>BLG  | Neogen<br>Veratox<br>Gliadin R5  | Neogen<br>Veratox<br>Gliadin   | Neogen<br>Biokits<br>Gluten  |
|--------------------|--|--|---|--|--|--|
| Product group      | Milk / milk proteins   |  |   | Gliadin / gluten   |  |  |
| Extraction         | Homogenize, extract with pre-heated allergen extraction buffer and additive powder, test supernatant | Homogenize, extract with pre-heated allergen extraction buffer and additive powder, test supernatant | Homogenize, extract with pre-heated allergen extraction buffer, centrifuge and dilute extract | Homogenize, ethanol extraction. Cocktail solution for heat – processed samples. Centrifuge and dilute extract in buffer. | Homogenise, ethanol extraction with extraction additive powder. (Cocktail solution for heat – processed samples). Centrifuge and dilute extract in buffer. | Prepare ethanolic extraction buffer and add to homogenised sample, blend or homogenise, dilute extract   |
| Methodology        | Quantitative Sandwich ELISA (10+10+10 minutes incubations)   | Quantitative Sandwich ELISA (10+10+10 minutes incubations)   | Quantitative Indirect Competitive ELISA assay. Total test incubation time 120 minutes.        | Quantitative Sandwich ELISA (10+10+10 minutes incubations)   | Quantitative Sandwich ELISA (10+10+10 minutes incubations)   | Quantitative sandwich ELISA. Total test incubation time 120 minutes.   |
| Measuring Range    | 2.5 – 25 ppm NFDM (non-fat dry milk)   | 2.5 – 15 ppm NFDM (non-fat dry milk)<br>0.72- 4.3 ppm casein   | 2.5-40 ppm BLG  | 2.5-40 ppm Gliadin   | 5-50 ppm Gliadin   | 3-50 ppm gluten  |
| Standards          | 2.5/5/10/25 ppm  | 2.5/5/10/15 ppm  | Milk protein standard (requires dilution)   | 2.5/5/10/20/40 ppm   | 5/10/20/50 ppm   | 3/5/10/20/50 ppm   |
| Limit of Detection | 1 ppm NFDM   | 1 ppm NFDM   | 2 ppm BLG   | 1 ppm Gliadin  | 0.88ppm Gliadin  | 1 ppm gluten   |
| Specificity        | Specific polyclonal antibodies to Casein and Whey proteins   | Specific polyclonal antibodies to Casein proteins  | Polyclonal antibody specifically detects BLG  | Licensed monoclonal antibody to Prolamins (wheat gliadin, rye secalin and barley hordein)                                | Specific monoclonal antibodies to prolamins (wheat gliadin, rye secalin and barley hordein)  | Licensed monoclonal antibody.<br>The antibody is known to be reactive against both glutenin and gliadin fractions of gluten (Skerritt et al 1989). |
| Number of Tests    | 48 well plate  | 48 well plate  | 48 well plate   | 48 well plate  | 48 well plate  | 96 well plate  |
| Approval           |  |  |   |  |  | <b>AOAC 991.19 protocol</b>  |
| Catalogue No.      | 8470   | 8460   | 902061Y   | 8510   | 8480   | 802002Y  |

|                    | Neogen Veratox Egg  | Neogen Biokits Egg   | Neogen Veratox Mustard  | Neogen Veratox Soy  | Neogen Veratox Lupine   | Neogen Veratox Histamine                                  |
|--------------------|---|--|---|---|---|---|
| Product group      | Egg   |  | Mustard   | Soy   | Lupine  | Histamine   |
| Extraction         | Homogenize, extract with pre-heated allergen extraction buffer and additive powder, centrifuge if necessary | Homogenise, extract with pre-heated allergen extraction buffer, centrifuge, dilute extract | Homogenize, extract with pre-heated allergen extraction buffer and additive powder, centrifuge if necessary | Homogenize, extract with pre-heated allergen extraction buffer and additive powder, centrifuge if necessary | Homogenize, extract with pre-heated allergen extraction buffer and additive powder, centrifuge if necessary | Homogenise, extract in distilled water, dilute in diluent |
| Methodology        | Quantitative Sandwich ELISA (10+10+10 minutes incubations)  | Quantitative Sandwich Elisa. Total test incubation time 75 minutes                         | Quantitative Sandwich ELISA (10+10+10 minutes incubations)  | Quantitative Sandwich ELISA (10+10+10 minutes incubations)  | Quantitative Sandwich ELISA (10+10+10 minutes incubations)  | Competative ELISA (10 +10 minute) incubations             |
| Measuring Range    | 2.5 – 25 ppm whole dried egg  | 0.5-10 ppm egg white protein   | 2.5-25 ppm mustard  | 10 - 100ppm soy protein isolate (SPI)   | 2.5-25 ppm lupine   | 2.5-40 ppm histamine                                      |
| Standards          | 2.5/5/10/25 ppm   | 0.5/1/2/5/10 ppm   | 2.5/5/10/25 ppm   | 10/25/50/100 ppm  | 2.5/5/10/25 ppm   | 2.5/5/10/20/50  |
| Limit of Detection | 0.6 ppm   | 0.1 ppm egg white protein  | 2.5ppm  | 10ppm   | 2.5ppm  | 2.5 ppm   |
| Specificity        | Unprocessed and heat-processed egg white proteins   | The polyclonal antibody specifically detects ovomucoid                                     | Mustard seed proteins   | Monoclonal capture and polyclonal detector antibodies to Soy proteins                                       | Lupine proteins   | Histamine   |
| Number of Tests    | 48 well plate   | 48 well plate  | 48 well plate   | 48 well plate   | 48 well plate   | 48 well plate   |
| Approval           |   |  |   |   |   | <b>AOAC- RI - 070703</b>                                  |
| Catalogue No.      | 8450  | 902072T  | 8400  | 8410  | 8500  | 9505  |

|                 | Neogen<br>Alert<br>Almond   | Neogen<br>Alert<br>Egg  | Neogen<br>Alert<br>Gliadin   | Neogen<br>Alert<br>Gliadin R5  | Neogen<br>Alert<br>Total Milk  | Neogen<br>Alert<br>Peanut   |
|-----------------|---|---|--|--|--|---|
| Product group   | Qualitative Screening ELISA   |   |  |  |  |   |
| Extraction      | Homogenize, extract with pre-heated allergen extraction buffer and additive powder, centrifuge if necessary | Homogenize, extract with pre-heated allergen extraction buffer and additive powder, centrifuge if necessary | Homogenise, ethanol extraction with extraction additive powder. (Cocktail solution for heat – processed samples). Centrifuge and dilute extract in buffer. | Homogenise, ethanol extraction. Cocktail solution for heat – processed samples. Centrifuge and dilute extract in buffer. | Homogenize, extract with pre-heated allergen extraction buffer and additive powder, test supernatant | Homogenize, extract with pre-heated allergen extraction buffer and additive powder, centrifuge if necessary |
| Methodology     | Qualitative Sandwich ELISA (10+10+10 minutes incubations)   | Qualitative Sandwich ELISA (10+10+10 minutes incubations)   | Qualitative Sandwich ELISA (10+10+10 minutes incubations)  | Qualitative Sandwich ELISA (10+10+10 minutes incubations)  | Qualitative Sandwich ELISA (10+10+10 minutes incubations)  | Qualitative Sandwich ELISA (10+10+10 minutes incubations)   |
| Measuring Range | Screens 5ppm almond   | Screens 5ppm whole dried egg  | Screens 10 ppm gliadin   | Screens at 10 ppm Gliadin  | 5 and 10 ppm NFDM (non-fat dry milk)   | 5 ppm peanut  |
| Standards       | 5ppm  | 5 ppm   | 10 ppm   | 10 ppm   | 5 and 10 ppm   | 5 ppm   |
| Specificity     | Specific polyclonal antibodies to Almond proteins   | Unprocessed and heat processed egg white proteins   | Specific monoclonal antibodies to prolamins (wheat gliadin, rye secalin and barley hordein)  | Liscensed monoclonal antibody Prolamins (wheat gliadin, rye secalin and barley hordein)                                  | Specific polyclonal antibodies to Casein and Whey proteins   | Specific polyclonal antibodies to Peanut proteins   |
| Number of Tests | 24 well plate   | 24 well plate   | 24 well plate  | 24 well plate  | 24well plate   | 24 well plate   |
| Approval        |   |   |  |  |  |   |
| Catalogue No.   | 8441  | 8451  | 8481   | 8511   | 8471   | 8431  |

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|                    | <b>R-Biopharm<br/>RIDASCREEN®<br/>FAST Peanut</b>                                       | <b>R-Biopharm<br/>RIDA®<br/>QUICK Peanut</b>  | <b>R-Biopharm<br/>RIDASCREEN®<br/>FAST Almond</b>                          | <b>R-Biopharm<br/>RIDASCREEN®<br/>FAST Hazelnut</b>                         | <b>R-Biopharm<br/>RIDA®<br/>QUICK Hazelnut</b>                              | <b>R-Biopharm<br/>RIDASCREEN®<br/>FAST Macadamia</b>                       |
|--------------------|---|---|--|---|---|--|
| Product group      | <b>Nuts</b>   |   |  |   |   |  |
| Extraction         | Homogenize, extract with pre-heated allergen extraction buffer, centrifuge              | Homogenize, extract with pre-heated allergen extraction buffer, centrifuge              | Homogenize, extract with pre-heated allergen extraction buffer, centrifuge | Homogenize, extract with pre-heated allergen extraction buffer, centrifuge  | Homogenize, extract with pre-heated allergen extraction buffer, centrifuge  | Homogenize, extract with pre-heated allergen extraction buffer, centrifuge |
| Methodology        | Sandwich ELISA (10+10+10 minutes incubations) quantitative                              | Immunochromatographic test (10 minutes incubation) qualitative                          | Sandwich ELISA (10+10+10 minutes incubations) quantitative                 | Sandwich ELISA (10+10+10 minutes incubations) quantitative                  | Immunochromatographic test (10 minutes incubation) qualitative              | Sandwich ELISA (10+10+10 minutes incubations) quantitative                 |
| Measuring Range    | 2.5-20 ppm peanut   |   | 2.5-20 ppm almond  | 2.5-20 ppm hazelnut   |   | 1-27 ppm macadamia   |
| Standards          | 2.5/5/10/20 ppm   |   | 2.5/5/10/20 ppm  | 2.5/5/10/20 ppm   |   | 1/3/9/27 ppm   |
| Limit of Detection | 1.5 ppm peanut  | 5 ppm peanut  | 1.7 ppm almond   | 1.5 ppm hazelnut  | 5 ppm hazelnut  | 0.64 ppm macadamia   |
| Specificity        | Specific polyclonal antibodies to Ara h1, Ara h2, Ara h3 and additional peanut proteins | Specific polyclonal antibodies to Ara h1, Ara h2, Ara h3 and additional peanut proteins | Specific polyclonal antibodies to almond proteins                          | Specific monoclonal antibodies to hazelnut antigens (Corylin a9 and others) | Specific monoclonal antibodies to hazelnut antigens (Corylin a9 and others) | Specific polyclonal antibodies to macadamia proteins                       |
| Number of Tests    | 48 well plate   | 25 test strips per kit  | 48 well plate  | 48 well plate   | 25 test strips per kit  | 48 well plate  |
| Approval           | AOAC - RI - 030404  |   |  | §64 LFGB L 44.00-7  |   |  |
| Catalogue No.      | R 6202  | R 6203  | R 6901   | R 6802  | R 6803  | R 6852   |

|                    | <b>R-Biopharm<br/>RIDASCREEN®<br/>FAST Casein</b>  | <b>R-Biopharm<br/>RIDASCREEN®<br/>FAST β-Lactoglobulin</b>   | <b>R-Biopharm<br/>RIDASCREEN®<br/>β-Lactoglobulin</b>                                    | <b>R-Biopharm<br/>RIDASCREEN®<br/>FAST Milk</b>  | <b>R-Biopharm<br/>RIDASCREEN®<br/>Gliadin</b>   | <b>R-Biopharm<br/>RIDASCREEN®<br/>FAST Gliadin</b>  |
|--------------------|--|--|--|--|---|---|
| Product group      | <b>Milk / milk proteins</b>  |  |  |  | <b>Gliadin / gluten</b>   |   |
| Extraction         | Homogenize, extract with pre-heated allergen extraction buffer, centrifuge                       | Homogenize, incubate with hot extraction solution, dilute and extract with pre-heated allergen extraction buffer, centrifuge, dilute | Reconstitute infant formula with water, dilute with allergen extraction buffer           | Homogenize, incubate with hot extraction solution, dilute and extract with pre-heated allergen extraction buffer, centrifuge, dilute | Homogenize, open up with extraction solution or cocktail (patented) at 50°C, extract with propanol or ethanol, centrifuge, dilute                 | Homogenize, open up with extraction solution or cocktail (patented) at 50°C, extract with propanol or ethanol, centrifuge, dilute                 |
| Methodology        | Sandwich ELISA (10+10+10 minutes incubations) quantitative                                       | Sandwich ELISA (10+10+10 minutes incubations) quantitative   | Competitive ELISA (120+30+15 minutes incubations) quantitative                           | Sandwich ELISA (10+10+10 minutes incubations) quantitative   | Sandwich ELISA (30+30+30 minutes incubations) quantitative  | Sandwich ELISA (10+10+10 minutes incubations) quantitative  |
| Measuring Range    | 0.5-13.5 ppm casein  | 0.5-13.5 ppm β-lactoglobulin   | 10-810 ppb β-lactoglobulin   | 2.5-67.5 ppm milk protein  | 5-80 ppb gliadin  | 10-80 ppb gliadin   |
| Standards          | 0.5/1.5/4.5/13.5 ppm   | 0.5/1.5/4.5/13.5 ppm   | 10/30/90/270/810 ppb   | 2.5/7.5/22.5/67.5 ppm  | 5/10/20/40/80 ppb gliadin   | 10/20/40/80 ppb gliadin   |
| Limit of Detection | 0.24 ppm casein in ice, chocolate, wine and drinks. 1.36 ppm casein in bakery goods and sausages | 0.19 ppm β-lactoglobulin   | 0.115 ppm β-lactoglobulin  | 0.7 ppm milk protein   | 1.5 ppm gliadin   | 2 ppm gliadin   |
| Specificity        | Specific polyclonal antibodies to α-, β- and κ-casein from cow, sheep, goat and buffalo milk     | Specific polyclonal antibodies to β-lactoglobulin from cow, sheep, goat and buffalo milk   | Specific polyclonal antibodies to β-lactoglobulin from cow, sheep, goat and buffalo milk | Specific polyclonal antibodies to α-, β-, κ-casein and to β-lactoglobulin from cow, sheep, goat and buffalo milk                     | 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. |
| Number of Tests    | 48 well plate  | 48 well plate  | 96 well plate  | 48 well plate  | 96 well plate   | 48 well plate   |
| Approval           |  |  |  |  | AOAC Official Method of Analysis.<br>AOAC-RI 120601<br>Codex Alimentarius<br>Type I Method  |   |
| Catalogue No.      | R 4612   | R 4902   | R 4901   | R 4652   | R 7001  | R 7002  |

|                    | <b>R-Biopharm<br/>RIDASCREEN®<br/>Gliadin competitive</b>   | <b>R-Biopharm<br/>RIDA®<br/>QUICK Gliadin</b>   | <b>R-Biopharm<br/>RIDA®<br/>QUICK Gliadin single<br/>packaged</b>   |
|--------------------|---|---|---|
| Product group      | <b>Gliadin / gluten</b>   |   |   |
| Extraction         | Homogenize, extract with 60% ethanol, centrifuge, dilute  | Homogenize, extract with 60% ethanol, centrifuge, dilute  | Homogenize, extract with 60% ethanol, centrifuge, dilute  |
| Methodology        | Competitive ELISA (30+10 minutes incubations) quantitative  | Immunochromatographic test (5 minutes incubation) qualitative   | Immunochromatographic test (5 minutes incubation) qualitative   |
| Measuring Range    | 10-270 ppb gliadin  |   |   |
| Standards          | 10/30/90/270 ppb gliadin  |   |   |
| Limit of Detection | 1.36 ppm gliadin  | 2.5 ppm gliadin in raw material<br>0.5 µg/100cm <sup>2</sup> gliadin on surfaces  | 2.5 ppm gliadin in raw material<br>0.5 µg/100cm <sup>2</sup> gliadin on surfaces  |
| Specificity        | 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. |
| Number of Tests    | 96 well plate   | 25 test strips per kit  | 25 separately packaged test strips per kit  |
| Approval           |   |   |   |
| Catalogue No.      | R 7021  | R 7003  | R 7004  |



| R-Biopharm<br>RIDASCREEN®<br>FAST Senf/Mustard                                    | R-Biopharm<br>RIDASCREEN®<br>FAST Lupine                                     | R-Biopharm<br>RIDASCREEN®<br>FAST Crustacean                               | R-Biopharm Roche<br>Sulfite   |
|---|--|--|---|
| <b>Others</b>   |  |  |   |
| Homogenize, extract with pre-heated allergen extraction buffer, centrifuge        | Homogenize, extract with pre-heated allergen extraction buffer, centrifuge   | Homogenize, extract with pre-heated allergen extraction buffer, centrifuge | Homogenize, extract with water, centrifuge                            |
| Sandwich ELISA (10+10+10 minutes incubations) quantitative                        | Sandwich ELISA (10+10+10 minutes incubations) quantitative                   | Sandwich ELISA (10+10+10 minutes incubations) quantitative                 | Enzymatic bioanalysis (40 minutes) quantitative                       |
| 0.5-13.5 ppm mustard powder   | 1-27 ppm lupine proteins   | 0.5-13.5 ppm crustacean proteins   | 0.03-0.3 g/l sulfite  |
| 0.5/1.5/4.5/13.5 ppm  | 1/3/9/27 ppm   | 0.5/1.5/4.5/13.5 ppm   |   |
| 0.22 ppm mustard powder   | 0.6 ppm lupine proteins  | 0.172 ppm crustacean proteins  | 0.3 mg/l sulfite  |
| Specific polyclonal antibodies to mustard proteins. Cross-reactivity to rapeseed. | Specific polyclonal antibodies to lupine proteins (e.g. $\gamma$ -Conglutin) | Specific polyclonal antibodies to crustacean proteins                      | Specific enzymes for sulfite. Possible interference by ascorbic acid. |
| 48 well plate   | 48 well plate  | 48 well plate  | 31 determinations per kit   |
| R 6152  | R 6102   | R 7302   | 10725854035   |

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|                    | <b>Romer Labs<br/>AgraQuant®<br/>Peanut</b>                 | <b>Romer Labs<br/>AgraQuant®<br/>Hazelnut</b>               | <b>Romer Labs<br/>AgraQuant®<br/>Almond</b>                 | <b>Romer Labs<br/>AgraQuant®<br/>Walnut</b>                 | <b>Romer Labs<br/>AgraQuant®<br/>Sesame</b>                 | <b>Romer Labs<br/>AgraQuant®<br/>Soy</b>                      | <b>Romer Labs<br/>AgraQuant®<br/>Lupin</b>                  |
|--------------------|---|---|---|---|---|---|---|
| Extraction         | Homogenize, hot extraction with supplied buffer, centrifuge | Homogenize, hot extraction with supplied buffer, centrifuge | Homogenize, hot extraction with supplied buffer, centrifuge | Homogenize, hot extraction with supplied buffer, centrifuge | Homogenize, hot extraction with supplied buffer, centrifuge | Homogenize, hot extraction with supplied buffer, centrifuge   | Homogenize, hot extraction with supplied buffer, centrifuge |
| Methodology        | 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     | Sandwich ELISA (20+20+20 min. incubations) quantitative     | Sandwich ELISA (20+20+20 min. incubations) quantitative       | Sandwich ELISA (20+20+20 min. incubations) quantitative     |
| Measuring Range    | 1 – 40 ppm  | 1 – 40 ppm  | 0.4 – 10 ppm  | 2 – 60 ppm  | 2 – 30 ppm  | 0.04 – 1 ppm STI ≡<br>7.6 – 190 ppm soy protein               | 2 – 30 ppm  |
| Standards          | 0/1/4/10/40 ppm   | 0/1/4/10/40 ppm   | 0/0.4/1/4/10 ppm  | 0/2/6/20/60 ppm   | 0/2/5/15/30 ppm   | 0/0.04/0.1/0.4/1 ppm  | 0/2/5/15/30 ppm   |
| Limit of Detection | 0.1 ppm   | 0.3 ppm   | 0.2 ppm   | 0.35 ppm  | 0.2 ppm   | 16 ppb STI  | 0.2 ppm   |
| Specificity        | Specific polyclonal antibodies to peanut protein            | Specific polyclonal antibodies to hazelnut protein          | Specific polyclonal antibodies to almond protein            | Specific polyclonal antibodies to walnut protein            | Specific polyclonal antibodies to sesame protein            | Specific polyclonal antibodies to STI (Soy-Trypsin-Inhibitor) | Specific polyclonal antibodies to lupin protein             |
| Number of Tests    | 48 wells; up to 43 samples per kit                          | 48 wells; up to 43 samples per kit                          | 48 wells; up to 43 samples per kit                          | 48 wells; up to 43 samples per kit                          | 48 wells; up to 43 samples per kit                          | 48 wells; up to 43 samples per kit                            | 48 wells; up to 43 samples per kit                          |
| Approval           |   |   |   |   |   |   |   |
| Catalogue No.      | COKAL0148   | COKAL0348   | COKAL0748   | COKAL0948   | COKAL1948   | COKAL0448   | COKAL1548   |

|                    | <b>Romer Labs<br/>AgraQuant®<br/>Mustard</b>                | <b>Romer Labs<br/>AgraQuant®<br/>Gluten</b>                        | <b>Romer Labs<br/>AgraQuant®<br/>Gluten G12</b>   | <b>Romer Labs<br/>AgraQuant® Egg<br/>White Protein</b>      | <b>Romer Labs<br/>AgraQuant®<br/>Casein</b>                 | <b>Romer Labs<br/>AgraQuant®<br/>β-Lactoglobulin</b>        | <b>Romer Labs<br/>AgraQuant®<br/>Crustacea</b>              |
|--------------------|---|--|---|---|---|---|---|
| Extraction         | Homogenize, hot extraction with supplied buffer, centrifuge | Homogenize, extraction with ethanol, centrifuge, dilution          | Homogenize, extraction with Romer extraction solution and ethanol, centrifuge, dilution | Homogenize, hot extraction with supplied buffer, centrifuge | Homogenize, hot extraction with supplied buffer, centrifuge | Homogenize, hot extraction with supplied buffer, centrifuge | Homogenize, hot extraction with supplied buffer, centrifuge |
| Methodology        | 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     | Sandwich ELISA (20+20+20 min. incubations) quantitative     | Sandwich ELISA (20+20+20 min. incubations) quantitative     | Sandwich ELISA (20+20+20 min. incubations) quantitative     |
| Measuring Range    | 2 – 60 ppm  | 4 – 120 ppm  | 4 – 200 ppm   | 0.4 – 10 ppm  | 0.2 – 6 ppm   | 10 – 400 ppb  | 0.1 – 2 ppm crustacea protein                               |
| Standards          | 0/2/6/20/60 ppm   | 0/4/12/40/120 ppm  | 0/4/20/80/200 ppm   | 0/2/6/20/60 ppm   | 0/2/5/15/30 ppm   | 0/0.04/0.1/0.4/1 ppm  | 0/0.1/0.3/1/2 ppm   |
| Limit of Detection | 1 ppm   | 0.6 ppm  | 2 ppm   | 0.05 ppm  | 0.04 ppm  | 1.5 ppb   | 4.5 ppb   |
| Specificity        | Specific polyclonal antibodies to mustard protein           | Specific polyclonal antibodies to prolamines of wheat, rye, barley | Specific monoclonal G12 antibodies to prolamines of wheat, rye, barley, oat (if toxic)  | Specific polyclonal antibodies to ovomucoid                 | Specific polyclonal antibodies to α-, β-, K- bovine casein  | Specific polyclonal antibodies to bovine β-lactoglobulin    | Specific polyclonal antibodies to crustacean tropomyocin    |
| Number of Tests    | 48 wells; up to 43 samples per kit                          | 48 wells; up to 43 samples per kit                                 | 96 wells; up to 86 samples per kit  | 48 wells; up to 43 samples per kit                          | 96 wells; up to 86 samples per kit                          | 48 wells; up to 43 samples per kit                          | 48 wells; up to 43 samples per kit                          |
| Approval           |   |  |   |   |   |   |   |
| Catalogue No.      | COKAL2148   | COKAL0248  | COKAL0200   | COKAL0848   | COKAL1200   | COKAL1048   | COKAL2248   |

**Contact:**

Romer Labs / Coring (Germany): [romerlabs.com](http://romerlabs.com) / [www.coring.de](http://www.coring.de)

**2. Rapid test kits (lateral flow)*****Ifp / romerlabs: AgraStrips®***

| Allergen         | Cat. No.         | Device              | Limit of Detection | antibody   | No. Of reactions | Extraction time | Assay time | remarks                                   |
|------------------|------------------|---------------------|--------------------|------------|------------------|-----------------|------------|---|
| Gluten G12       | COKAL02225<br>AS | Lateral Flow Strips |                    |            |                  |                 |            |   |
| peanut           | COKAL0110A<br>S  | Lateral Flow Strips | 2 ppm              | polyclonal | 10               | 1 min           | 10 min     | cross: green peas, white beans, soy beans |
| Gluten           | COKAL0210A<br>S  | Lateral Flow Strips | 4 ppm              | polyclonal | 10               | 1 min           | 10 min     |   |
| Hazelnut         | COKAL0310A<br>S  | Lateral Flow Strips | 2 ppm              | polyclonal | 10               | 1 min           | 10 min     | cross: pecan nut, Walnut                  |
| Almond           | COKAL0710A<br>S  | Lateral Flow Strips | 2 ppm              | polyclonal | 10               | 1 min           | 10 min     |   |
| Walnut           | COKAL0910A<br>S  | Lateral Flow Strips | 5 ppm              | polyclonal | 10               | 1 min           | 10 min     | cross: Pecan nut                          |
| Casein           | COKAL1210A<br>S  | Lateral Flow Strips | 2 ppm              | polyclonal | 10               | 1 min           | 10 min     |   |
| Cashew/Pistachio | COKAL1310A<br>S  | Lateral Flow Strips | 5 ppm              | polyclonal | 10               | 1 min           | 10 min     |   |
| Mustard          | COKAL2110A<br>S  | Lateral Flow Strips | 2 ppm              | polyclonal | 10               | 1 min           | 10 min     | cross: rape seed                          |
| Lupine           | COKAL1510A<br>S  | Lateral Flow Strips | 10 ppm             | polyclonal | 10               | 1 min           | 10 min     |   |
| Macadamia nut    | COKAL0610A<br>S  | Lateral Flow Strips | 2 ppm              | polyclonal | 10               | 1 min           | 10 min     |   |
| Brazil nut       | COKAL0710A<br>S  | Lateral Flow Strips | 5 ppm              | polyclonal | 10               | 1 min           | 10 min     |   |
| Egg              | COKAL1810A<br>S  | Lateral Flow Strips | 2 ppm              | polyclonal | 10               | 1 min           | 10 min     |   |
| Sesame           | COKAL1910A<br>S  | Lateral Flow Strips | 5 ppm              | polyclonal | 10               | 1 min           | 10 min     |   |

**Morinaga Institute of Biological Science, Inc.: Allergen Lateral Flow Kit**

| Allergen         | Cat. No. | Device              | Limit of Detection | antibody   | No. Of reactions | Extraction time | Assay time | remarks |
|------------------|----------|---------------------|--------------------|------------|------------------|-----------------|------------|---------|
| Egg (Ovalbumin)  |          | Lateral Flow Strips | 5 ppm              | polyclonal | 20               | 10 min          | 5 min      |         |
| Casein           |          | Lateral Flow Strips | 5 ppm              | polyclonal | 20               | 10 min          | 5 min      |         |
| Gluten (Gliadin) |          | Lateral Flow Strips | 5 ppm              | polyclonal | 20               | 10 min          | 5 min      |         |
| Peanut           |          | Lateral Flow Strips | 5 ppm              | polyclonal | 20               | 10 min          | 5 min      |         |
| Buckwheat        |          | Lateral Flow Strips | 5 ppm              | polyclonal | 20               | 10 min          | 5 min      |         |

**bioavid / R-Biopharm: Lateral Flow**

| Allergen      | Cat. No.       | Device              | Limit of Detection | antibody | No. Of reactions | Extraction time | Assay time | remarks                            |
|---------------|----------------|---------------------|--------------------|----------|------------------|-----------------|------------|------------------------------------|
| Almond        | BL601-10 / -25 | Lateral Flow Strips | 1 ppm              | k.A.     | 10 / 25          | 5 min           | 10 min     | Apricot seed                       |
| Brazil nut    | BL602-10 / -25 | Lateral Flow Strips | 1 ppm              | k.A.     | 10 / 25          | 5 min           | 10 min     |                                    |
| Cashew        | BL610-10 / -25 | Lateral Flow Strips | 1 ppm              | k.A.     | 10 / 25          | 5 min           | 10 min     |                                    |
| Coconut       | BL600-10 / -25 | Lateral Flow Strips | 1 ppm              | k.A.     | 10 / 25          | 5 min           | 10 min     |                                    |
| Crustacean    | BL616-10 / -25 | Lateral Flow Strips | 10 ppm             | k.A.     | 10 / 25          | 5 min           | 10 min     |                                    |
| Egg           | BL608-10 / -25 | Lateral Flow Strips | 1 ppm              | k.A.     | 10 / 25          | 5 min           | 10 min     |                                    |
| Hazelnut      | BL604-10 / -25 | Lateral Flow Strips | 1 ppm              | k.A.     | 10 / 25          | 5 min           | 10 min     | Walnut 0,1%,<br>Pumpkin seed 0,01% |
| Macadamia nut | BL605-10 / -25 | Lateral Flow Strips | 1 ppm              | k.A.     | 10 / 25          | 5 min           | 10 min     |                                    |

|           |                |                     |        |      |         |       |        |  |
|-----------|----------------|---------------------|--------|------|---------|-------|--------|--|
| Milk      | BL613-10 / -25 | Lateral Flow Strips | 1 ppm  | k.A. | 10 / 25 | 5 min | 10 min |  |
| Mustard   | BL603-10 / -25 | Lateral Flow Strips | 1 ppm  | k.A. | 10 / 25 | 5 min | 10 min | Rape seed  |
| Peanut    | BL606-10 / -25 | Lateral Flow Strips | 5 ppm  | k.A. | 10 / 25 | 5 min | 10 min |  |
| Pistachio | BL611-10 / -25 | Lateral Flow Strips | 1 ppm  | k.A. | 10 / 25 | 5 min | 10 min | Brazil nut 0,01%, Cashew 4%, Hazelnut 0,1%, Pumpkin seed 0,1%, Walnut 0,8% |
| Sesame    | BL609-10 / -25 | Lateral Flow Strips | 1 ppm  | k.A. | 10 / 25 | 5 min | 10 min |  |
| Soy       | BL615-10 / -25 | Lateral Flow Strips | 1 ppm  | k.A. | 10 / 25 | 5 min | 10 min |  |
| Walnut    | BL607-10 / -25 | Lateral Flow Strips | 10 ppm | k.A. | 10 / 25 | 5 min | 15 min | Pecan nut 100%   |

All parameters are also available with 50 and 100 test strips (on request).

### ***R-Biopharm: RIDA®QUICK***

| Allergen | Cat. No.                        | Device              | Limit of Detection   | antibody               | No. Of reactions | Extraction time | Assay time | remarks                          |
|----------|---------------------------------|---------------------|--|------------------------|------------------|-----------------|------------|----------------------------------|
| Gliadin  | R7003 / R7004 (single packaged) | Lateral Flow Strips | 2,5 ppm Gliadin, 5 ppm Gluten<br>Surface swabbing: 0.5 µg Gliadin, 1.0 µg Gluten | R5 monoclonal antibody | 25               | 15 min          | 5 min      | Direct surface swabbing possible |
| Hazelnut | R6803                           | Lateral Flow Strips | 5 ppm  | k.A.                   | 25               | 5 min           | 10 min     |                                  |
| Peanut   | R6203                           | Lateral Flow Strips | 5 ppm  | k.A.                   | 25               | 5 min           | 10 min     |                                  |

**Neogen: Reveal**

| Allergen   | Cat. No. | Device              | Limit of Detection | antibody | No. Of reactions | Extraction time | Assay time | remarks |
|------------|----------|---------------------|--------------------|----------|------------------|-----------------|------------|---------|
| Peanut     | 8438     | Lateral Flow Strips | 5 ppm              | k.A.     | 25               |                 | 10 min     |         |
| Total milk | 8478     | Lateral Flow Strips | 5 ppm              | k.A.     | 24               |                 | 5 min      |         |

**Neogen / Tepnel: Reveal 3-D**

| Allergen  | Cat. No. | Device              | Limit of Detection | antibody | No. Of reactions | Extraction time | Assay time | remarks |
|-----------|----------|---------------------|--------------------|----------|------------------|-----------------|------------|---------|
| Almond    | 902086G  | Lateral Flow Strips | low ppm            | k.A.     | 10               | < 10 min        |            |         |
| Casein    | 902075M  | Lateral Flow Strips | low ppm            | k.A.     | 10               | < 10 min        |            |         |
| Egg       | 902082Q  | Lateral Flow Strips | low ppm            | k.A.     | 10               | < 10 min        |            |         |
| Gluten    | 901031P  | Lateral Flow Strips | low ppm            | k.A.     | 10               | < 10 min        |            |         |
| Hazelnut  | 902087E  | Lateral Flow Strips | low ppm            | k.A.     | 10               | < 10 min        |            |         |
| Peanut    | 901041L  | Lateral Flow Strips | low ppm            | k.A.     | 10               | < 10 min        |            |         |
| Crustacea | 902081S  | Lateral Flow Strips | low ppm            | k.A.     | 10               | < 10 min        |            |         |
| Soy       | 902093K  | Lateral Flow Strips | low ppm            | k.A.     | 10               | < 10 min        |            |         |