



AgraQuant[®]

Gluten G12[®] ELISA Kit

The AgraQuant[®] Gluten G12[®] is an ELISA test kit for the quantitative analysis of gluten in food and environmental samples. It uses the monoclonal G12[®] antibody which was developed to specifically detect the peptide fraction present in gluten which is most toxic for celiac disease patients.

G12[®] gluten antibody

The G12[®] antibody is a next generation monoclonal antibody that targets a toxic fragment of gluten that triggers the auto-immune reaction in celiac patients. Recent discussions about celiac disease have taken us from the concept of gluten detection to the detection of the relative toxicity of gluten for the food safety.

The G12[®] antibody used in AgraQuant[®] Gluten G12[®] was raised against an α 2-gliadin fragment that is 33 amino acids long and a principal contributor to gluten immunotoxicity. This 33-mer is highly resistant to breakdown by digestive enzymes and is, therefore, a suitable molecule for the use as an analytical marker.

Validations

The AgraQuant[®] Gluten G12[®] method is approved as AOAC Official Method of Analysis (OMA) 2014.03 and as AACC International Approved Method 38-52.01.

How the test works

AgraQuant[®] Gluten G12[®] kits are based on ELISA technology. After extraction, the toxic fraction of any gluten present in your sample is captured by G12[®] antibodies that were pre-coated onto the wells. An enzymatic reaction causes color to develop in a manner that corresponds to the concentration of gluten present in the sample, allowing its quantification.

Content of the kit

- Set of 5 Standards
- 1 antibody-coated plate
- 1 bottle of extraction solution
- 1 bottle of diluent buffer
- 1 bottle of wash buffer
- 1 sachet of fish gelatin
- 1 bottle of detection antibody
- 1 bottle of substrate
- 1 bottle of stop solution



Features and Benefits

Specific

Monoclonal antibody detecting toxic fragment of gluten

Highly sensitive

- Limit of Detection: 2 ppm
- Quantitation Range: 4 – 200 ppm

Stable

12 months shelf life

Fast

3 x 20 minutes incubation time

User friendly

- Ready-to-use reagents
- Simple handling procedure
- Extraction buffer included
- Calculation Spreadsheet available



AgraQuant® Gluten G12®

Carefully read the product manual before performing any test.

- 1** Add standards and samples to the antibody-coated wells and incubate for 20 min.
- 2** Discard contents from the wells and wash with wash buffer.
- 3** Tap to dry the plate.
- 4** Add conjugate solution to the wells and incubate for 20 min.
- 5** Discard contents from the wells and wash with wash buffer.
- 6** Tap to dry the plate.
- 7** Add substrate to each well and incubate for 20 min in the dark.
- 8** Add stop solution to each well.
- 9** Read wells with a microwell reader using a 450 nm filter.
- 10** Interpret your results in a fast and easy way by using the AgraQuant® Spreadsheets provided by Romer Labs.

Item	Description	Quantitation Range	Item No.
AgraQuant® Gluten G12®	96 wells	4 – 200 ppm	10001994