

CATALOG# M2103

# WHEAT/GLUTEN (GLIADIN) ELISA KIT

## Catalog number

Wheat/Gluten (Gliadin) ELISA Kit.....M2103

## Intended use

A high quality enzyme immunoassay for the quantification of gluten and gliadin in processed and unprocessed food.

## Test principle

Most test kits cannot accurately measure wheat protein in processed foods after they are subjected to heat, denaturing the allergens. Crystal Chem's Gluten (Gliadin) Protein ELISA kit is able to overcome this challenge by intentionally denaturing the allergens present in the sample and then using antibodies against the denatured allergens.

Wheat protein extracted from raw and processed food binds to polyclonal antibodies bound to the surface of a microplate. After incubation and washing, an enzymed labeled antibody is added to form a complex on the surface. A substrate for the enzyme is added, and the concentration of wheat protein is determined by color intensity.

## Specifications

<b>Sample Types</b>	Food samples
<b>Assay Time</b>	< 3 hours
<b>Standard Range Assay</b>	0.26 - 17 ppm Gluten 0.31 - 20 ppm Wheat
<b>High Range Assay</b>	1.05 - 68 ppm Gluten 1.24 - 80 ppm Wheat
<b>Sample Size</b>	1 g
<b>Sensitivity</b>	0.26 (0.31) ppm Gluten (Wheat)
<b>Precision</b>	CV < 10%

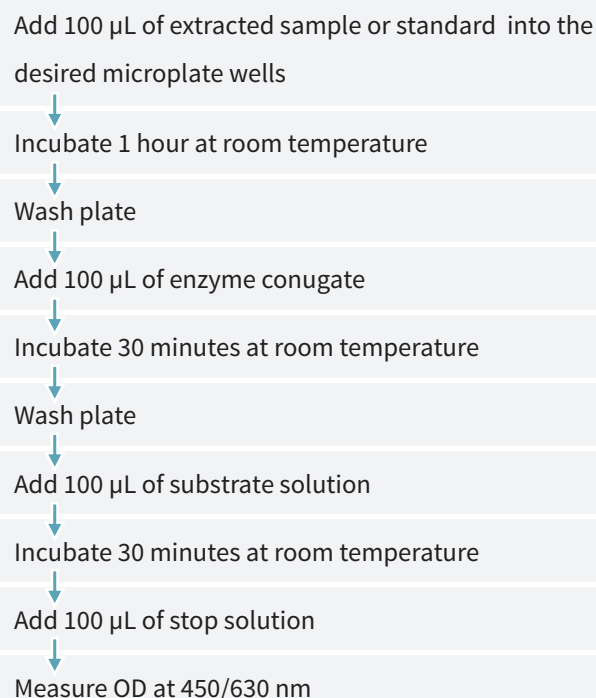
## Highlights

- ✓ Detects allergens in raw and processed foods
- ✓ Very sensitive (0.26 ppm in gluten)
- ✓ High recovery and specificity

## Summary of extraction

The gluten (gliadin) protein must first be extracted from the food sample by adding 19mL of extraction solution to 1g of ground food. The mixture is then heated, at boiling for 10mins or the mixture shaken for 12 hours at room temperature. The mixture's pH then needs to be adjusted to 6-8. The supernatant is removed and then diluted 20 fold after centrifuging the sample at 3000g for 20 minutes.

## Summary of protocol



See kit insert or email us for a complete protocol

