Product Information

Anti-Gliadin (Wheat)–Peroxidase Conjugate Antibody Produced in Rabbit

Fractionated antiserum, PBS solution

A1052

Product Description

Anti-Gliadin is produced in rabbit using purified gliadin (prolamin from wheat) as the immunogen. The fractionation procedure yields primarily the immunoglobulin fraction of antiserum. The antibody is conjugated to horseradish peroxidase by a two-step glutaraldehyde procedure. The product is purified to remove unconjugated material.

Rabbit Anti-Gliadin shows a greater specificity for native gliadin than for heat treated gliadin. The conjugate reacts with prolamin fractions of rye, barley, soy and oats. No cross reactivity is observed in such extracts from rice or potato.

The alcohol soluble proteins (prolamins) from wheat, rye, barley and oats produce the harmful effect of coeliac disease or gluten-sensitive enteropathy in humans by causing characteristic changes in the intestinal mucosa. Patients so affected have to avoid eating these grains and replace them with rice, corn, soy, potatoes, etc. Many gluten-free foods are produced industrially; thus several immunoassays have been developed for the determination of gliadin in supposedly gluten-free foods.

Reagent

Reagent Supplied as a Solution in 0.01 M phosphate buffered saline, pH 7.4, containing 1% bovine serum albumin and 0.05% MIT.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses.

Storage

For continuous use, store at 2-8 °C for up to one month. For extended storage, the solution may be frozen in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

Protein Content: 10-20 mg/mL by absorbance at 280 nm.

Molar Ratio (Antibody/Enzyme): 0.6-1.5

Direct ELISA

A minimum dilution of 1:1,000 is determined by direct ELISA using gliadin at 5 µg/mL in carbonate/bicarbonate buffer, pH 9.5 as the coating solution.

Substrate

o-Phenylenediamine Dihydrochloride (OPD), 0.4 mg/mL in phosphate citrate buffer with sodium perborate. OPD is available as P6912, and Phosphate Citrate Buffer with Sodium Perborate is available as P4922.

Dot Blot

A minimum dilution of 1:500 was determined in a direct dot blot using a 2-4 µL dot of gliadin at a concentration of 0.25-0.5 mg/mL or 1:150-1:300 dilution of sample extract.

Note: In order to obtain best results, it is recommended that each individual user determine their working dilution by titration assay.

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