

## From Biology to Discovery™

## Gliadin Peptide (14D5) Antibody

Subcategory: Mouse Monoclonal Antibody Cat. No.: 250437 Unit: 0.2 mg

## **Description:**

Celiac disease is associated with a CD4+ T-cell response to epitopes of gliadin presented by HLA-DQ2 or -DQ8 class II MHC molecules. These epitopes are present in a 33-mer peptide of wheat alpha-gliadin, residues 56-88, which is resistant to digestion and forms a substrate for tissue transglutaminase (TG2), generating the glutamic acid residues essential for binding to HLA-DQ2. The immunogen corresponds to a deamidated form of a region that includes the T-cell epitopes, including the immunodominant PQPQLPY region and two PXPQP motifs associated with binding to IgA from patients with celiac disease. Complete homology exists between residues 63-73, 70-80 and 77-87 of wheat alpha gliadin. This antibody reacts strongly with the deamidated peptide but cross-reacts about 5% with the nondeamidated peptide KLQPFPQPQLPYPQPQ

Isotype: Mouse IgG2a Applications: E Species Reactivity: PI Format: Each vial contains 0.2 mg IgG in 0.2 ml (1 mg/ml) of PBS pH7.4 with 0.09% sodium azide. Antibody was purified by Protein-A/G affinity chromatography.

Alternate Names: Alpha gliadin; prolamin Accession No.: Q41531

**Antigen:** Gliadin-related peptide (alpha-gliadin aa58-73, KLQPFPQPELPYPQPQ) coupled to immunogenic carrier protein PPD (tuberculin).

**Application Notes:** Product Cat. No. 250437 reacts in ELISA with both the deamidated gliadin-related peptide (KLQPFPQPELPYPQPQ) and non-deamidated gliadinrelated peptide (KLQPFPQPQLPYPQPQ) coated directly in microplate. The signal for the deamidated gliadin-related peptide is 20-fold higher. E: 1:64,000 **Storage:** Store at 4°C. Product is guaranteed 6 months from the date of shipment.

For research use only, not for diagnostic or therapeutic procedures.