## 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 $\lg A$ 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 $0.2 \mathrm{mg} \operatorname{lgG}$ in $0.2 \mathrm{ml}(1 \mathrm{mg} / \mathrm{ml})$ 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. $\mathrm{E}: 1: 64,000$

Storage: Store at $4^{\circ} \mathrm{C}$. Product is guaranteed 6 months from the date of shipment.

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

