

# Gliadin Deamidated Antibodies

see also **Tissue transglutaminase** and **Endomysium antibodies**

General:

Gluten-sensitive enteropathies are antibody reactions against gliadin fractions of gluten in genetically predisposed persons (association with HLA antigen DR3). The disorder presents with diarrhea/steatorrhea in the child or adult age; rare and late complication is the T-cell lymphoma of the small intestine. Gliadin IgA antibodies correlate with the disease activity in children. As IgA deficiencies are known to be relatively frequent in celiac disease patients, it is recommended to always test IgA as well, as this would result in false negative values.

Studies have shown that analyzing levels of deamidated gliadin antibodies increases the sensitivity, specificity, and accuracy when testing for Celiac disease as compared to analyzing levels of gliadin antibodies as was previously done.

The following tests are available:

- **Deamidated Gliadin IgA antibodies**

Indication: Gluten-sensitive enteropathy (sprue, celiac disease)

Material: 1 ml serum

Stability: up to 14 days at 2 to 8°C

TAT: 3 days, FML

Method: IFT

Units: Titer

Ref.- range: <1:10

- **Deamidated Gliadin IgG antibodies**

Indication: Gluten-sensitive enteropathy (sprue, celiac disease)

Material: 1 ml serum

TAT: 7-10 days\*

Method: FIA

Units: U/mL

Ref.- range: see report

- **Gliadin IgA antibodies in stool**

General:

Gliadins are proteins from wheat flour containing high concentrations of glutamine and proline. In celiac disease this substance acts allergotoxic on intestinal mucous membranes (villus atrophy, cryptic hyperplasia, malabsorption symptoms). The binding of the gliadin peptide is related to class II-MHC molecules. Cytotoxic effects derive from pro-inflammatory cytokines from T-cells, specific immunoglobulins and also by gliadin-specific IgA. The diagnostic advantage is an early detection compared to a later appearance of the antibody in serum.

Indication: suspicion of gluten-sensitive enteropathy

Material: 5 g stool

Preanalytics: cooled

TAT: 7-10 days\*

Method: EIA

Units: IU/L

Ref.- range: < 100

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit

<http://www.fml-dubai.com/parameter-listings/>