Celiac Disease Diagnostic Testing Algorithm

Testing for selective IgA deficiency

IgA ≥1 mg/dL and below age-matched reference values

Selective IgA deficiency*

IgA <1 mg/dL

TTGA/82587 Tissue Transglutaminase (tTG) Antibody, IgA, Serum

TSTGP/83671 Tissue Transglutaminase (tTG) Antibodies, IgA and IgG Profile, Serum

DGLDN/89031 Gliadin (Deamidated) Antibodies Evaluation, IgG and IgA, Serum

<4.0 U/mL

4.0–10.0 U/mL

>10.0 U/mL

Celiac disease very unlikely.

Exception:

−10% of patients with celiac disease are seronegative
If celiac disease is highly suspected, consider CELI/88906 Celiac-Associated HLA-DQ Alpha 1 and DQ Beta 1 Medium-High Resolution DNA Typing, Blood

Negative (EMA negative and d-gliadin <20.0 Units)

Positive (EMA positive and/or d-gliadin ≥20.0 Units)

Possible false-positive tTG result

Celiac disease possible but unlikely
If strong suspicion of celiac disease remains, perform HLA typing.

Biopsy results inconsistent with serology

CELI/88906 Celiac-Associated HLA-DQ Alpha 1 and DQ Beta 1 Medium-High Resolution DNA Typing, Blood

Negative

Positive for DQ2 or DQ8

Possible celiac disease

Not celiac disease

Negative

Positive for DQ2 or DQ8

Possible celiac disease

Not celiac disease

Follow-up patient for future development of celiac disease

CTTGP/83660 Tissue Transglutaminase (tTG) Antibody, IgG, Serum

DGGL/89030 Gliadin (Deamidated) Antibody, IgG, Serum

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CELI/88906 Celiac-Associated HLA-DQ Alpha 1 and DQ Beta 1 Medium-High Resolution DNA Typing, Blood

Negative

Positive for DQ2 or DQ8

Possible celiac disease

Not celiac disease

Possible celiac disease

Follow-up patient for future development of celiac disease

* For individuals with clinical symptoms suggestive of recurrent infections, suggest further evaluation for possible primary immunodeficiency: IGGS/9259 IgG Subclasses, Serum

IMMG/8156 Immunoglobulins (IgG, IgA, and IgM), Serum