Lab Dept: Serology

Test Name: TISSUE TRANSGLUTAMINASE (tTG) IGA

ANTIBODY REFLEX

General Information

Lab Order Codes: TTGA

Synonyms: Transglutaminase, Ttg IgA

CPT Codes: 83516 – Immunoassay for analyte other than infectious agent antibody or

infectious agent antigen, qualitative or semiquantitative; multiple step

method

82784 – Total IgA (when indicated)

Test Includes: TTGA concentration reported as numeric Elia U/mL and interpreted as

negative, positive, or equivocal.

Reflex: Total IgA will be performed at an additional charge when tTG-IgA is

negative and falls below an undetectable level

Logistics

Test Indications: Tissue transglutaminase has been identified as the major autoantigen in

celiac disease. IgA antibodies against tTG are highly disease specific serological markers for celiac disease and dermatitis herpetiformis. tTG IgG antibodies are less specific for these diseases but are helpful markers in

patients with IgA deficiency.

Celiac disease is a life-long condition in which ingestion of gluten, the water insoluble wheat-gliadin and the prolamins in rye and barley, leads to chronic

inflammation and damage of the small intestinal mucosa.

Also useful in monitoring adherence to gluten-free diet in patients with dermatitis herpetiformis and celiac disease, or evaluating children with

failure to thrive.

Lab Testing Sections: Chemistry – Minneapolis Campus only

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 4 days, performed Monday - Friday

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: SST (Red, marble or gold top tube)

Draw Volume: 1 mL blood

Processed Volume: 0.3 mL (Minimum: 0.2 mL) serum

Collection: Routine venipuncture

Special Processing: Lab Staff: Centrifuge specimen, remove serum aliquot into a screw-top

plastic vial. Store at refrigerated temperatures. Freeze at or below -20°C if

not tested within 48 hours.

Patient Preparation: None

Sample Rejection: Specimens other than serum; mislabeled or unlabeled specimens

Interpretive

Reference Range:

| Range (All ages) | Interpretation |
|--------------------------------|--|
| <7 Elia U/mL | Negative |
| 7 – 10 Elia U/mL | Equivocal |
| >10 Elia U/mL | Positive |
| Reflexive Total IgA (mg/dL) | Please refer to IgA (Immunoglobulin A) for reference ranges. |

Interpretation:

TTGA > 10 = Suggestive of Celiac disease

Critical Values: N/A

Limitations: Affected individuals who have been on a gluten-free diet prior to testing may

have a negative result.

A negative tTG IgA test does not rule out celiac disease. If serology tests are negative for celiac disease and the patient is symptomatic, a total IgA serum test is indicated to rule out IgA deficiency confounding the serologic

diagnosis of celiac disease.

Methodology: Fluoroenzyme immunoassay

References: Phadia AB Elia Directions for Use (May 2008)

CLSI document H18-A3 (Volume 24 Number 38): Procedures for the

Handling and Processing of Blood Specimens; Approved Guidelines - Third

Edition

Jacobs & DeMott Laboratory Test Handbook (2001) Lexi-Comp, Inc,

Hudson, OH, 5th Edition

Updates: 10/14/2008: Reference range update. Units change from Units to U/mL.

11/2/2009: Testing moved from MML to testing internally at Children's.

2/9/2016: Update container types