Endomysial IgG Antibody Screen and Titer in Human Serum

Specimen Type	Human Serum
Specimen Volume	2 mL
Collection	Draw blood in a plain red-top tube. Serum gel tubes are acceptable. Allow the blood to clot in an upright position for at least 30 minutes but not longer than 1 hour before centrifugation. Centrifuge for at least 15 minutes at 2200-2500 RPM at ambient temperature within one hour of collection. Store at -20°C and send 2 mL of serum frozen in a plastic vial.
Minimum Volume	0.5 mL
Handling	Ship frozen on dry ice.
Rejection Criteria	Grossly hemolyzed, lipemic or microbially contaminated specimens Specimens outside of listed stability Samples submitted without two unique identifiers and date of collection.
Stability	1 Month frozen 2 Days ambient 2 Weeks refrigerated Up to 3 freeze-thaw cycles
Methodology	Immunofluorescence Assay
Reference Values	Normal: Negative, Less than 1:10 titer Positive: Greater than or Equal to 1:10 titer
Turnaround Time	Up to 2 business days
CPT Code	Screen: 86255 Titer: 86256
Clinical Significance	Serological methods of detecting Immunoglobulin A (IgA) antibodies to gliadin, endomysium (EMA), reticulin, and tissue transglutaminase are routinely used for diagnosing both symptomatic and asymptomatic patients with Celiac Disease (CD). Since Immunoglobulin A (IgA) deficiency is 10 to 15 times more common in patients with Celiac Disease than in healthy subjects, IgG-specific antibody tests for endomysium are useful for the identification of IgA-deficient patients with CD.
Principle	This assay is an indirect immunofluorescence (IFA) antibody test for the qualitative and semi-quantitative detection of endomysial antibodies (EMA) IgG and/or IgA in human serum as an aid in the diagnosis of celiac disease (CD) and dermatitis herpetiformis (DH). Patient serum is incubated on substrate sections to allow binding of antibodies to the substrate. Any unbound antibodies are removed by rinsing. Bound antibodies of the IgG or IgA class are detected by incubation of the substrate with anti-human immunoglobulin conjugate. Reactions are observed under a fluorescence microscope. The presence of Endomysial Antibodies (EMA) is demonstrated by an apple green fluorescence of the endomysial lining of smooth muscle bundles.