Lab Dept: Serology

Test Name: SMOOTH MUSCLE ANTIBODY

General Information

Lab Order Codes: SMAS

Synonyms: Smooth Muscle Antibodies, serum; SMA

CPT Codes: 86255 - Fluorescent noninfectious agent antibody; screen each antibody
86256 – Titer, each antibody (if positive)

Test Includes: Smooth Muscle Antibody screen. If results are positive, the titer will be performed at an additional charge.

Logistics

Test Indications: Testing for smooth muscle antibodies is useful for the evaluation of patients with chronic liver disease in whom the diagnosis of chronic active autoimmune hepatitis is suspected.

Other diseases in this differential diagnosis group include primary biliary cirrhosis, chronic viral hepatitis, and alcoholic chronic hepatitis.

Sera from patients with autoimmune chronic active hepatitis contain antibodies to smooth muscle antigens that are detectable by indirect immunofluorescence on substrates that contain smooth muscle.

The antibodies are primarily of the IgG isotype.

Lab Testing Sections: Serology - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: SMAS)

Phone Numbers: MIN Lab: 612-813-6280
STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 - 4 days, test set up Monday - Saturday

Special Instructions: N/A

Specimen
Specimen Type: Blood

Container: SST (Gold, marble or red) tube

Draw Volume: 2.4 mL (Minimum: 1.2 mL) blood

Processed Volume: 0.8 mL (Minimum: 0.4 mL) serum

Collection: Routine blood collection

Special Processing: Lab Staff: Centrifuge specimen, remove serum aliquot into a screw-capped plastic vial. Store and ship at refrigerated temperatures. Forward promptly.

Patient Preparation: None

Sample Rejection: Specimens other than serum; warm specimens; gross hemolysis; gross lipemia; mislabeled or unlabeled specimens

Interpretive

Reference Range: Negative, if positive, results are titered.

Interpretation: Seropositivity for smooth muscle antibodies (SMA) is consistent with a diagnosis of autoimmune hepatitis (AIH). A negative result for SMA does not exclude a diagnosis of AIH.

Critical Values: N/A

Limitations: Serologic tests for autoantibodies, including smooth muscle antibodies (SMA), should not be relied upon exclusively to determine the etiology or prognosis of patients with severe liver disease.

Methodology: Indirect immunofluorescence

References: Mayo Clinic Laboratories January 2021