Test Definition: SMA

Anti-Smooth Muscle Ab

Overview

Useful For

Evaluating patients with chronic liver disease in whom the diagnosis of chronic active autoimmune hepatitis is suspected

Method Name

Indirect Immunofluorescence

NY State Available

Yes

Specimen

Specimen Type

Serum

Specimen Required

Container/Tube:

Preferred: Serum gel

Acceptable: Red top

Specimen Volume:0.8 mL

Forms

If not ordering electronically, complete, print, and send 1 of the following forms with the specimen:

-General Request (T239)

-Gastroenterology and Hepatology Client Test Request (T728)

Specimen Minimum Volume

0.4 mL

Reject Due To

Gross hemolysis	Reject
Gross lipemia	Reject
Gross icterus	OK

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum	Refrigerated (preferred)	14 days	
	Frozen	14 days	

Clinical and Interpretive

Clinical Information

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 predominantly of the IgG isotype.

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

Reference Values

Negative

If positive, results are titered.

Reference values apply to all ages.

Interpretation

Antibody titers in the range of 80 to 320 occur commonly in patients with active chronic hepatitis; lower titers (usually <80) may occur in the other conditions mentioned earlier.

Cautions

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

A positive result for antismooth muscle antibodies may occur in patient who do not have autoimmune hepatitis. A negative result does not exclude a diagnosis of autoimmune hepatitis.

Clinical Reference

Czaja AJ, Homburger HA: Autoantibodies in liver disease. Gastroenterology 2001;120:239-249

Performance

Method Description

The patient's serum in 1:20 and 1:40 (initial screening) dilutions is added to fresh tissue from mouse stomach/kidney and incubated; fluorescein-conjugated antiglobulin is then added. The slides are read with a fluorescence microscope.(Doniach D, Roitt IM, Walker JG, Sherlock S: Tissue antibodies in primary biliary cirrhosis, active chronic [lupoid] hepatitis, cryptogenic cirrhosis, and other liver diseases and their clinical implications. Clin Exp Immunol 1966;1:237-262)

PDF Report

No

Day(s) and Time(s) Test Performed

Monday through Saturday; 11 a.m.

Analytic Time

2 days

Maximum Laboratory Time

4 days

Specimen Retention Time

14 days

Performing Laboratory Location

Rochester

Fees and Codes

Fees

- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their Regional Manager. For assistance, contact Customer Service.

Test Classification

This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

CPT Code Information

86255

86256-Titer (if appropriate)

LOINC® Information

Test ID	Test Order Name	Order LOINC Value
SMA	Anti-Smooth Muscle Ab	26971-2

Result ID	Test Result Name	Result LOINC Value
6284	Anti-Smooth Muscle Ab	26971-2