



Liver Antibody Screen

Synonyms

Mitochondrial, smooth muscle, LKM antibodies

Clinical Indication

This test detects IgG autoantibodies against smooth muscle, mitochondria and liver kidney microsomal antigen.

Useful in patients with signs and symptoms liver disease e.g. fatigue, itching, abdominal pain, jaundice, oedema, etc.

- Autoimmune hepatitis
- Primary Biliary Cholangitis

It is essential to provide relevant clinical information.

Part of Profile / See Also

Liver specific antibody profile

Request Form

Combined Pathology manual Blood form or ICE request

Availability / Frequency of Analysis

Assay performed daily Monday to Friday

Turnaround Time

Tests are performed on the next routine working day after receipt of the sample.

Patient Preparation

None required

Sample Requirements

Please note a separate sample is required when Immunology tests are requested in addition to Biochemistry tests

Specimen Type

Serum

Volume

7 ml

Container



Yellow top (SST) tube

Or



Paediatric Yellow top (SST) tube

Reference Range & Units

Sera are screened at a dilution of 1/40 (paediatric samples 1/10).

In general titres greater or equal to 1/80 are more likely to be significant.

Interferences

Heavily haemolysed or lipaemic samples are not suitable

Interpretation & Clinical

Decision Value (if applicable)

Samples found to be anti-mitochondrial positive will be referred for M2 antibodies and other liver-specific antibodies. Samples found to be positive at 1/40 may be referred for other Liver Specific Antibodies if clinical details and pattern observed indicate testing.

Below are listed the most common reported antibodies and their main clinical association:

Mitochondrial antibody - Main association is with Primary Biliary Cholangitis but can be seen in connective tissue disease and some other autoimmune diseases

Smooth muscle antibody - autoimmune hepatitis, viral infections, SLE and RA.

Liver Kidney Microsomal Antibody - Autoimmune and viral induced hepatitis.

Please note: Low titre antibodies may be found in normal people and in a variety of diseases without an autoimmune basis, such as inflammation and cancer. The prevalence of these antibodies increases with age, but in general titres of greater than 1/80 are often significant disease indicators. Low or absent titres do not exclude disease in the presence of relevant clinical features.

If strong staining on the gastric parietal cell is seen as an incidental finding, intrinsic factor antibodies will be added as this may indicate pernicious anaemia.

References

<https://labtestsonline.org.uk>

Test code

LIVS

Lab Handling

Aliquot and store at 4°C prior to testing and at -20°C or below for up to one month after receipt.