



Procedure	Result	Units	Ref Interval	Accession	Collected	Received	Reported/Verified
Soluble Liver Antigen Antibody, IgG	25.0 H	U	[0.0-24.9]	20-085-900022	25-Mar-20 07:55:00	25-Mar-20 07:55:00	25-Mar-20 08:06:34
F-Actin (Smooth Muscle) Ab, IgG by ELISA	20 H	Units	[0-19]	20-085-900022	25-Mar-20 07:55:00	25-Mar-20 07:55:00	25-Mar-20 08:06:34
Liver-Kid Microsome-1 Ab, IgG by ELISA	25.0 H	U	[0.0-24.9]	20-085-900022	25-Mar-20 07:55:00	25-Mar-20 07:55:00	25-Mar-20 08:06:34
Mitochondrial (M2) Antibody, IgG	20.1 H	Units	[0.0-20.0]	20-085-900022	25-Mar-20 07:55:00	25-Mar-20 07:55:00	25-Mar-20 08:06:34
Smooth Muscle Ab, IgG Titer	<1:20		[<1:20]	20-085-900022	25-Mar-20 07:55:00	25-Mar-20 07:55:00	25-Mar-20 08:06:34
Antinuclear Antibody (ANA), HEp-2, IgG	Detected *		[<1:80]	20-085-900022	25-Mar-20 07:55:00	25-Mar-20 07:55:00	25-Mar-20 08:06:34
ANA Pattern	Homogeneous *			20-085-900022	25-Mar-20 07:55:00	25-Mar-20 07:55:00	25-Mar-20 08:06:34
ANA Titer	1:80 *			20-085-900022	25-Mar-20 07:55:00	25-Mar-20 07:55:00	25-Mar-20 08:06:46
ANA Pattern 2	Speckled *			20-085-900022	25-Mar-20 07:55:00	25-Mar-20 07:55:00	25-Mar-20 08:06:43
ANA Titer 2	1:80 *			20-085-900022	25-Mar-20 07:55:00	25-Mar-20 07:55:00	25-Mar-20 08:06:48
Cytoplasmic Pattern Titer	1:80 *			20-085-900022	25-Mar-20 07:55:00	25-Mar-20 07:55:00	25-Mar-20 08:06:44
ANA Interpretive Comment	See Note			20-085-900022	25-Mar-20 07:55:00	25-Mar-20 07:55:00	25-Mar-20 08:06:45

25-Mar-20 07:55:00 ANA Interpretive Comment

Homogeneous Pattern

Clinical associations: SLE, drug-induced SLE or JIA.

Main autoantibodies: Anti-dsDNA, anti-histones or anti-chromatin (anti-nucleosome)

Speckled Pattern

Clinical associations: SLE, SSc, SjS, DM, PM, MCTD, UCTD. May also be found in healthy individuals

Main autoantibodies: Anti-SSA-52 (Ro52), anti-SSA-60 (Ro60), anti-SS-B/LA, anti-Topo-1 (anti-Scl-70), Smith, anti-U1-RNP, anti-U2-RNP, anti-Mi-2, anti-TIF1g, anti-Ku, anti-RNA polymerase, anti-DFS70/LEDGF-P75

Cytoplasmic Pattern

Clinical associations: ARS, ILD, IM, SLE, SSc, SjS, RA, MCTD, PBC, AIH, infectious, neurologic, and other inflammatory conditions. May also be found in healthy individuals

Main autoantibodies: Anti-Ribosomal P, anti-tRNA synthetase (anti-Jo-1, anti-PL-7, anti-PL-12, anti-EJ, anti-OJ), anti-signal recognition particle (anti-SRP) or anti-mitochondria (anti-AMA)

Clinical Relevance

Antisynthetase syndrome (ARS), chronic active hepatitis (CAH), inflammatory myopathies (IM) [dermatomyositis (DM), polymyositis (PM), necrotizing autoimmune myopathy (NAM)], interstitial lung disease (ILD), juvenile idiopathic arthritis (JIA), mixed connective tissue disease (MCTD), primary biliary cholangitis (PBC), rheumatoid arthritis (RA), systemic autoimmune rheumatic diseases (SARD), Sjogren syndrome (SjS), systemic lupus erythematosus (SLE), systemic sclerosis (SSc), undifferentiated connective tissue disease (UCTD).

25-Mar-20 07:55:00 Soluble Liver Antigen Antibody, IgG:
 INTERPRETIVE INFORMATION: Soluble Liver Antigen Antibody, IgG

0.0 - 20.0 U Negative
 20.1 - 24.9 U Equivocal
 25.0 U or greater Positive

The presence of SLA antibodies has almost 100% specificity for autoimmune hepatitis, although only 12-30% have these antibodies. Thus, a negative SLA IgG test does not rule out autoimmune hepatitis.

25-Mar-20 07:55:00 F-Actin (Smooth Muscle) Ab, IgG by ELISA:
 INTERPRETIVE INFORMATION: F-Actin (Smooth Muscle) Antibody, IgG by ELISA

* Abnormal, # = Corrected, C = Critical, f = Footnote, H = High, L = Low, t = Interpretive Text, @ = Reference Lab

19 Units or less Negative
20 - 30 Units Weak Positive-Suggest repeat
testing in two to three weeks
with fresh specimen.
31 Units or greater..... Positive-Suggestive of
autoimmune hepatitis type 1
or chronic active hepatitis.

F-actin IgG antibodies have been shown to have increased sensitivity for autoimmune hepatitis (AIH) but lower specificity than smooth muscle antibodies (SMA). F-actin IgG antibodies can also be seen in SMA-negative disease controls (non-AIH), especially in patients with primary biliary cirrhosis and chronic hepatitis C infections. Some patients with AIH may be SMA-positive but negative for F-actin IgG. Consider testing for SMA by IFA if suspicion for AIH is strong.

25-Mar-20 07:55:00 Liver-Kid Microsome-1 Ab, IgG by ELISA:
INTERPRETIVE INFORMATION: Liver-Kidney Microsome-1 Antibody, IgG by
ELISA

0.0 - 20.0 U Negative
20.1 - 24.9 U Equivocal
25.0 U or Greater Positive

A positive result indicates the presence of IgG antibodies to recombinant human P450 2D6 and suggests the possibility of autoimmune hepatitis, type 2. A negative LKM-1 does not rule out the presence of autoimmune hepatitis, type 2.

25-Mar-20 07:55:00 Mitochondrial (M2) Antibody, IgG:
REFERENCE INTERVAL: Mitochondrial (M2) Antibody, IgG

20.0 Units or less Negative
20.1 - 24.9 Units..... Equivocal
25.0 Units or greater..... Positive

Anti-mitochondrial antibodies (AMA) are thought to be present in 90-95% of patients with primary biliary cholangitis (PBC). However, the frequency of detected antibodies may be cohort or assay dependent, as lower sensitivities have been reported. Not all PBC patients are positive for AMA; some patients may be positive for SP100 and/or GP210 antibodies. A negative result does not rule out PBC.

25-Mar-20 07:55:00 Smooth Muscle Ab, IgG Titer:
INTERPRETIVE INFORMATION: Smooth Muscle Ab, IgG Titer

Less than 1:20 Negative - No antibody detected.
1:20 - 1:80 Weak Positive - Suggest repeat
in two to three weeks with fresh
specimen.
1:160 or greater Positive - Suggestive of
autoimmune hepatitis or chronic
active hepatitis.

* Abnormal, # = Corrected, C = Critical, f = Footnote, H = High, L = Low, t = Interpretive Text, @ = Reference Lab

25-Mar-20 07:55:00 ANA Interpretive Comment:
INTERPRETIVE INFORMATION: ANA Interpretive Comment

Presence of antinuclear antibodies (ANA) is a hallmark feature of systemic autoimmune rheumatic diseases (SARD). ANA lacks diagnostic specificity and is associated with a variety of diseases (cancers, autoimmune, infectious, and inflammatory conditions) and may also occur in healthy individuals in varying prevalence. The lack of diagnostic specificity requires confirmation of positive ANA by more-specific serologic tests. ANA (nuclear reactivity) positive patterns reported include centromere, homogeneous, nuclear dots, nucleolar, or speckled. Cytoplasmic pattern is reported as ANA negative. All patterns are reported to endpoint titers (1:2560). Reported patterns may help guide differential diagnosis, although they may not be specific for individual antibodies or diseases. Negative results do not necessarily rule out SARD.