

INDICATIONS FOR TESTING
Liver disease of unknown etiology (all viral serologies negative, elevated transaminases)

ORDER
Autoimmune Liver Disease Evaluation with Reflex to Smooth Muscle Antibody (SMA) IgG, by IFA **AND** Antinuclear Antibodies (ANA), IgG by ELISA with Reflex to ANA, HEp-2 Substrate, IgG by IFA
OR
Individual tests:

- F-Actin (Smooth Muscle) Antibody, IgG by ELISA with Reflex to Smooth Muscle Antibody, IgG Titer
- Antinuclear Antibodies (ANA), IgG by ELISA with Reflex to ANA, HEp-2 Substrate, IgG by IFA
- Liver/Kidney Microsome-1 Antibody, IgG
- Mitochondrial M2 Antibody, IgG (ELISA)

Positive result(s)

Negative result(s)

ANA and/or F-actin/SMA +

LKM-1 +

AMA + and ANA +/-

ORDER

- Anti-Neutrophil Cytoplasmic Antibody, IgG
- Soluble Liver Antigen Antibody, IgG

AIH-1 or PSC

Suggests AIH-2

Suggests PBC

ORDER
Anti-Neutrophil Cytoplasmic Antibody, IgG, to differentiate between AIH-1 and PSC

Either test positive

Negative

pANCA + with atypical staining pattern

ANCA - SLA +
Suggests AIH-1

pANCA + with atypical staining pattern, SLA -

CCH AIC

Yes
Suggests PSC

No
Suggests AIH

Yes
Suggests PSC
Perform cholangiography

No
Suggests AIH or UC

Perform cholangiography

Test key

AMA	Mitochondrial M2 antibody
ANA	Antinuclear antibody
LKM-1	Liver-kidney microsome 1 (cytochrome P450 2D6)
pANCA	Perinuclear antineutrophil cytoplasmic antibody
SLA	Soluble liver antigen
SMA	Smooth muscle antibody

Disease key

AIC	Autoimmune cholangitis
AIH	Autoimmune hepatitis
PBC	Primary biliary cholangitis
PSC	Primary sclerosing cholangitis
UC	Ulcerative colitis