

# Smooth muscle autoantibodies ASMA

## General:

Anti-smooth muscle antibodies react with different antigens of the cytoplasm of the smooth muscle cell (actin, myosin, tropomyosin, troponin, meromyosin, microtubuli, desmin, tubulin, vimentin). Depending on the antigen- and epitope- specificity of the antibodies, reactions with the heart and skeletal muscle as well as with non-muscular cells can be detected in the IFT. Sporadically antibodies will target calmodulin. Therefore, various fluorescence patterns are detected, all with a different accentuation of ascertained antigens of the tissue components of the smooth muscle. Please note that actin antibodies are more specific in the diagnosis of autoimmune hepatitis.

**Occurrence:** autoimmune hepatitis type I, diagnostically relevant in association with anti-nuclear antibodies (ANA). In this context, mostly high-titer antibodies with actin-specificity of the IgG-isotype are observed. Primary biliary cirrhosis. Low-titer antibodies, mostly of the IgM-isotype also in viral infections, fibromyalgia. In around 5% of patients with autoimmune hepatitis type I, smooth muscle cell antibodies without actin specificity can be found.

**Indication:** Suspicion of chronic aggressive hepatitis (autoimmune hepatitis), positive cases should be tested for an actin-specificity

**Material:** 1 ml serum

**TAT:** 3 days, FML

**Method:** IFT

**Units:** Titer

**Ref.- range:** <1:100

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>