

# Jo 1 Histidyl tRNA Synthetase

## General:

Jo-1 (synonym: Histidyl-tRNA-Synthetase), molecular weight of 57.4 Da, located on chromosome 5q31,3, catalyzes the ester bond of histidine to its specific RNA. The reason of the development of the antibodies is not yet known, as a potential trigger infections with picorna viruses are discussed. Associations with HLA-DRw52 and HLA-DR3 have been described.

Appearance: Antibodies against Histidyl-tRNA-synthetase occur in around one third of adults with polymyositis or dermatomyositis especially in patients with simultaneous lung symptomatology, arthritis and Raynaudphenomenon. In juvenile myositis the antibodies appear less frequently. In adults, the antibodies are detectable at the onset of the disease often even before the manifestation of clinical symptoms. The antibodies mainly belong to the isotype IgG.

The antibodies can be also associated with anti-SS-A/Ro (anti-Ro 52 kDa). Antibody-positive patients often suffer heavier courses of the disease with more frequent exacerbations and a generally worse prognosis. Anti-Jo1- positive polymyositis can develop under D-penicillamine therapy which degenerates after stopping the medication. Also the antibodies of polymyositis-patients can degenerate under therapy with simultaneous improvement of the clinical symptoms.

Indication: Polymyositis, dermatomyositis, PM/DM-overlap-syndrome, diagnostic clarification in idiopathic fibrosing alveolitis, Raynaud-phenomenon. Examination at active stage and before therapy commencement.

Material: 1 ml serum

Stability: upto 14 days at 2 to 8°C

TAT: 3 days, FML

Method: BLOT

Units: qualitative

Ref.- range: negative

Note: included in ANA Profile

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