

Myositis Antibodies

Synonyms

Synthetase antibodies, dermatomyositis antibodies

Clinical Indication

Myositis, Inflammatory Myopathies, including Dermatomyositis (DM), Juvenile Myositis (JM/JDM) or Polymyositis (PM) and Inclusion Body Myositis (IBM)

The primary assay for Polymyositis or Dermatomyositis is the ANA by HEp2 or CTD screen.

It is essential to provide relevant clinical information.

Part of Profile / See Also

CTD screen, Anti-nuclear antibody, ENA screen, HEp2

Request Form

Combined Pathology manual blood form or ICE request

Availability / Frequency of Analysis

Referred test: Analysed by Sheffield Protein Reference Unit - 8494

Turnaround Time

28 days

Patient Preparation

No special preparation is 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



Paediatric yellow Top (SST) tube

Reference Range & Units

Results are reported as Positive or Negative.

Interferences

Interpretation & Clinical

Decision Value (if applicable)

Detection of autoantibodies to a family of aminoacyl-tRNA synthetases: Jo-1, PL-7, PL-12, SRP, Ku, Mi-2-alpha, Mi-2-beta, TIF-1- gamma, MDA5, NXP2, SAE1, Pm-Scl-100, Pm-Scl-75, EJ, OJ and Ro-52.

Jo-1 antibodies are found in 20-40% of patients with myositis, commonly in association with interstitial lung disease and arthralgia. These antibodies may also be detected by the CTD and ANA screens.

PL-7 and PL-12 are associated with polymyositis and dermatomyositis and anti-synthetase syndrome (ASS), a spectrum of myositis, interstitial pneumonia, non-erosive arthritis, fever and Raynaud's phenomena. PL-12 may also be associated with lung disease in the absence of clinically apparent myositis.

SRP antibodies are found in ~5% of cases of polymyositis and dermatomyositis. They are also markers for necrotising myopathy.

Ku antibodies are seen in several diseases including systemic lupus

erythematosus (SLE), mixed connective tissue disease, scleroderma, polymyositis/scleroderma overlap syndrome and pulmonary hypertension. They are of limited diagnostic value.

Mi-2 antibodies are typically found in those with steroid-responsive dermatomyositis. They are invariably of high titre and do not vary during the course of the disease or treatment.

Pm-Scl antibodies are found in 50-70% of patients with polymyositis/scleroderma overlap syndrome. Pm-Scl75 is found in 8% of those with myositis, 3% of those with systemic sclerosis and 25% of those with scleroderma/myositis overlap syndrome. Pm-Scl100 is not as strongly associated with systemic sclerosis as Pm-Scl75.

EJ and OJ antibodies are markers for polymyositis and can also be seen in interstitial lung fibrosis, overlap syndrome, arthritis and Raynaud's syndrome.

TIF-1-gamma antibodies can be seen in patient with cancer-associated myopathy

MDA5 antibodies are detected in 13-26% of dermatomyositis cases.

NXP2 antibodies can be associated with juvenile polymyositis and dermatomyositis; in adults they may be associated with breast, uterine or pancreatic carcinoma.

SAE1 antibodies are markers for dermatomyositis

Ro-52 antibodies can be seen in Sjogren's syndrome, SLE, cutaneous lupus erythematosus, neonatal lupus and primary biliary cirrhosis.

<https://sheffieldlaboratorymedicine.nhs.uk/search-test.php?search=3328>

References

Test code

NJO1

Lab Handling

Aliquot and store at 4-8°C prior to testing and at -20°C or below for up to 1 month after receipt.



8494

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ISO 15189:2022