

Guide to Anti-dsDNA and Anti-ENA testing

Autoantibody Disease association

dsDNA Anti-dsDNA antibodies have a high degree of specificity for SLE. Their titre may change with disease activity. Low levels (<15 IU/mL) may be seen in a variety of autoimmune disorders.

Jo-1 Jo-1 antibodies are associated with inflammatory myositis (polymyositis/dermatomyositis), particularly in a subset of patients with pulmonary involvement. They are often accompanied by Ro-52 antibodies, the significance of which is uncertain.

Mi-2 These antibodies are associated with inflammatory myositis, typically dermatomyositis with a 'shawl' rash and 'mechanic's' hands.

PCNA PCNA antibodies are present in a minority of SLE patients, though are quite specific for SLE.

PM-Scl PM-Scl antibodies are associated with myositis-scleroderma overlap and may predict a more benign prognosis. They may also be present in myositis or scleroderma alone.

RNP RNP antibodies define Mixed Connective Tissue Disease (MCTD), though may also be present in SLE.

Ro-52 The clinical significance of Ro-52 antibodies is uncertain.

Scl-70 Scl-70 antibodies are directed against topoisomerase 1 and are associated with systemic sclerosis (scleroderma), particularly with pulmonary involvement. They are also detected in some SLE patients, where they may be linked to the presence of pulmonary hypertension.

Sm Smith antibodies are highly specific for SLE (> 95%), though only <5% of SLE patients are positive for them. They predict disease severity (renal involvement).

SSA (Ro-60) SSA antibodies are associated with the presence of Sjögren's Syndrome, SLE, and subacute cutaneous LE. They may also cross the placenta leading to neonatal lupus syndromes e.g. congenital complete heart block.

SSB (La) SSB antibodies almost always occur together with SSA antibodies and are associated with Sjögren's Syndrome, SLE, and subacute cutaneous SLE. They may increase the chance of neonatal lupus syndrome in pregnant women when compared to SSA antibodies alone.

DFS70 This very common ANA pattern is not correlated with systemic autoimmune disease. Previously it may have been reported as a homogeneous pattern.