

Division of Laboratory Medicine

Immunology

Double stranded DNA antibodies (IgG)

General information

The presence of autoantibodies to double stranded DNA is strongly suggestive of SLE, although they are detected in only 40-60% of patients with this disease.

Specimen transport: At room temperature

Repeat frequency: We recommend not repeating this test more than once a month, unless the patient is undergoing plasmapheresis

Special precautions: None

Laboratory information

Normal reference range: 0-9.9 IU/mL

Volume and sample type: 7ml clotted blood

Method: Multiplex flow immunoassay and Immunofluorescence

Participation in EQA Scheme: Nuclear and Related Antigens

Turnaround time (calendar days from sample receipt to authorised result): Median - 2

Clinical information

Indications for the test: Diagnosis and monitoring of lupus

Factors affecting the test: We use two assays to detect DNA antibodies:

- Crithidia is a source of pure double stranded DNA and gives a qualitative result
- The multiplex assay can be contaminated by single stranded DNA, but gives quantitative results

The following configurations can be seen:

- Crithidia Positive + multiplex flow immunoassay positive = indicates active lupus
- Crithidia Negative + multiplex flow immunoassay positive = indicates single stranded DNA antibodies, usually triggered by infection or drugs

ICE reference: DS-DNA Antibodies

(Last updated December 2020)