

Specimen Collected: 09-Mar-21 11:55

Connective Tissue Dz, First Ln |Received: 09-Mar-21 11:55 | **Report/Verified: 09-Mar-21 12:34**
Pan wRflx

Procedure	Result	Units	Reference Interval
Double-Stranded DNA (dsDNA) Ab IgG ELISA	25 ^{H i1}	IU	0-24

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Procedure	Result	Units	Reference Interval
Smith (ENA) Antibody, IgG	1 ⁱ²	AU/mL	0-40
SSA-52 (Ro52) (ENA) Antibody, IgG	1 ⁱ³	AU/mL	0-40
SSA-60 (Ro60) (ENA) Antibody, IgG	1 ⁱ⁴	AU/mL	0-40
Smith/RNP (ENA) Ab, IgG	1 ⁱ⁵	AU/mL	0-40
Jo-1 (Histidyl-tRNA Synthetase) Ab, IgG	1 ⁱ⁶	AU/mL	0-40
SSB (La) (ENA) Antibody, IgG	1 ⁱ⁷	AU/mL	0-40
Scleroderma (Scl-70) (ENA) Antibody, IgG	1 ⁱ⁸	AU/mL	0-40

dsDNA (Crithidia luciliae) Ab IgG by IFA |Received: 09-Mar-21 11:55 | **Report/Verified: 09-Mar-21 12:35**

Procedure	Result	Units	Reference Interval
Double-Stranded DNA (dsDNA) Ab IgG IFA	<1:10 ⁱ⁹		<1:10

Test Information

i1: Double-Stranded DNA (dsDNA) Ab IgG ELISA
 INTERPRETIVE INFORMATION: Double-Stranded DNA (dsDNA) Ab IgG ELISA
 24 IU or less.....Negative
 25-30 IU.....Borderline Positive
 30-60 IU.....Low Positive
 60-200 IU.....Positive
 201 IU or greater....Strong Positive

Positivity for anti-double stranded DNA (anti-dsDNA) IgG antibody is a diagnostic criterion of systemic lupus erythematosus (SLE). Specimens are initially screened by enzyme-linked immunosorbent assay (ELISA). All ELISA results reported as "detected" (positive) are confirmed by a highly specific IFA titer (Crithidia luciliae indirect fluorescent test [CLIFT]). Some patients with early or inactive SLE may be positive for anti-dsDNA IgG by ELISA but negative by CLIFT. If the patient is negative by CLIFT but positive by ELISA and clinical suspicion remains, consider antinuclear antibody (ANA) testing by IFA. Additional information and

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Unless otherwise indicated, testing performed at:

ARUP Laboratories
 500 Chipeta Way, Salt Lake City, UT 84108
 Laboratory Director: Tracy I. George, MD

ARUP Accession: 21-068-900141
Report Request ID: 14708188
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 Page 1 of 4

Test Information

i1: Double-Stranded DNA (dsDNA) Ab IgG ELISA
recommendations for testing may be found at
<http://www.arupconsult.com/Topics/AutoimmuneDz/ConnectiveTissueDz/index.html>.

i2: Smith (ENA) Antibody, IgG
INTERPRETIVE INFORMATION: Smith (ENA) Antibody, IgG

- 29 AU/mL or Less Negative
- 30 - 40 AU/mL Equivocal
- 41 AU/mL or Greater Positive

Smith antibody is highly specific (greater than 90 percent) for systemic lupus erythematosus (SLE) but only occurs in 30-35 percent of SLE cases. The presence of antibodies to Smith has variable associations with SLE clinical manifestations.

i3: SSA-52 (Ro52) (ENA) Antibody, IgG
INTERPRETIVE INFORMATION: SSA-52 (Ro52) (ENA) Antibody, IgG

- 29 AU/mL or Less Negative
- 30 - 40 AU/mL Equivocal
- 41 AU/mL or Greater Positive

SSA-52 (Ro52) and/or SSA-60 (Ro60) antibodies are associated with a diagnosis of Sjogren syndrome, systemic lupus erythematosus (SLE), and systemic sclerosis. SSA-52 antibody overlaps significantly with the major SSc-related antibodies. SSA-52 (Ro52) antibody occurs frequently in patients with inflammatory myopathies, often in the presence of interstitial lung disease.

i4: SSA-60 (Ro60) (ENA) Antibody, IgG
REFERENCE INTERVAL: SSA-60 (Ro60) (ENA) Antibody, IgG

- 29 AU/mL or Less Negative
- 30 - 40 AU/mL Equivocal
- 41 AU/mL or Greater Positive

i5: Smith/RNP (ENA) Ab, IgG
INTERPRETIVE INFORMATION: Smith/RNP (ENA) Antibody, IgG

- 29 AU/mL or Less Negative
- 30 - 40 AU/mL Equivocal
- 41 AU/mL or Greater Positive

Smith/RNP antibodies are frequently seen in patients with mixed connective tissue disease (MCTD) and are also associated with other systemic autoimmune rheumatic diseases (SARDs) such as systemic lupus erythematosus (SLE), systemic sclerosis, and myositis. Antibodies targeting the Smith/RNP antigenic complex also recognize Smith antigens, therefore, the Smith antibody response must be considered when interpreting these results.

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i6: Jo-1 (Histidyl-tRNA Synthetase) Ab, IgG
INTERPRETIVE INFORMATION: Jo-1 Antibody, IgG

29 AU/mL or less.....Negative
30-40 AU/mL.....Equivocal
41 AU/mL or greater.....Positive

Presence of Jo-1 (antihistidyl transfer RNA [t-RNA] synthetase) antibody is associated with polymyositis and may also be seen in patients with dermatomyositis. Jo-1 antibody is associated with pulmonary involvement (interstitial lung disease), Raynaud phenomenon, arthritis, and mechanic's hands (implicated in antisynthetase syndrome).

i7: SSB (La) (ENA) Antibody, IgG
INTERPRETIVE INFORMATION: SSB (La) (ENA) Ab, IgG

29 AU/mL or Less Negative
30 - 40 AU/mL Equivocal
41 AU/mL or Greater Positive

SSB (La) antibody is seen in 50-60% of Sjogren syndrome cases and is specific if it is the only ENA antibody present. 15-25% of patients with systemic lupus erythematosus (SLE) and 5-10% of patients with progressive systemic sclerosis (PSS) also have this antibody.

i8: Scleroderma (Scl-70) (ENA) Antibody, IgG
INTERPRETIVE INFORMATION: Scleroderma (Scl-70) (ENA) Ab, IgG

29 AU/mL or Less Negative
30 - 40 AU/mL Equivocal
41 AU/mL or Greater Positive

The presence of Scl-70 antibodies (also referred to as topoisomerase I, topo-I or ATA) is considered diagnostic for systemic sclerosis (SSc). Scl-70 antibodies alone are detected in about 20 percent of SSc patients and are associated with the diffuse form of the disease, which may include specific organ involvement and poor prognosis. Scl-70 antibodies have also been reported in a varying percentage of patients with systemic lupus erythematosus (SLE). Scl-70 (topo-1) is a DNA binding protein and anti-DNA/DNA complexes in the sera of SLE patients may bind to topo-I, leading to a false-positive result. The presence of Scl-70 antibody in sera may also be due to contamination of recombinant Scl-70 with DNA derived from cellular material used in immunoassays. Strong clinical correlation is recommended if both Scl-70 and dsDNA antibodies are detected.

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Test Information

- i8: Scleroderma (Scl-70) (ENA) Antibody, IgG
Negative results do not necessarily rule out the presence of SSc. If clinical suspicion remains, consider further testing for centromere, RNA polymerase III and U3-RNP, PM/Scl, or Th/To antibodies.
- i9: Double-Stranded DNA (dsDNA) Ab IgG IFA
INTERPRETIVE INFORMATION: Double-Stranded DNA (dsDNA) Antibody, IgG by IFA (using *Crithidia luciliae*)

Positivity for anti-double stranded DNA (anti-dsDNA) IgG antibody is a diagnostic criterion of systemic lupus erythematosus (SLE). The presence of the anti-dsDNA IgG antibody is identified by IFA titer (*Crithidia luciliae* indirect fluorescent test [CLIFT]). CLIFT is highly specific for SLE with a sensitivity of 50-60 percent.

Some patients with early or inactive SLE may be positive for anti-dsDNA IgG by ELISA but negative by CLIFT. If the CLIFT result is negative but the patient has a positive ELISA and clinical suspicion remains, consider antinuclear antibody (ANA) testing by IFA. Additional information and recommendations for testing may be found at <http://www.arupconsult.com/Topics/AutoimmuneDz/ConnectiveTissueDz/index.html>.

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