Client: Example Client ABC123
123 Test Drive
Salt Lake City, UT 84108
UNITED STATES

Physician: Doctor, Example

Patient: Patient, Example

DOB	2/9/1998
Gender:	Female
Patient Identifiers:	01234567890ABCD, 012345
Visit Number (FIN):	01234567890ABCD
Collection Date:	00/00/0000 00:00

Connective Tissue Diseases Profile

ARUP test code 0051668

Smith (ENA) Antibody, IgG	149 AU/mL H	(Ref Interval: 0-40)

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.

Centromere Ab, IgG	2 AU/mL	(Ref Interval: 0-40)

INTERPRETIVE INFORMATION: Centromere Ab, IgG

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

When detected by this multiplex bead assay, the presence of centromere antibodies is mainly associated with CREST syndrome, a variant of systemic sclerosis (SSc). These antibodies target the centromere B, a dominant antigen of the centromeric complex associated with the centromere pattern observed in antinuclear antibody (ANA) testing by IFA. Centromere antibodies may also be seen in a varying percentage of patients with other autoimmune diseases, including diffuse cutaneous SSc, Raynaud syndrome, interstitial pulmonary fibrosis, autoimmune liver disease, systemic lupus erythematosus (SLE) and rheumatoid arthritis (RA).

A negative result indicates no detectable IgG antibodies to centromere B. If the result is negative but clinical suspicion for SSc is strong, consider testing for ANA by IFA along with other antibodies associated with SSc, including Scl-70, U3-RNP, PM/Scl, or Th/To.

Ribosome P Antibody, IgG	0 AU/mL	(Ref Interval: 0-40)

H=High, L=Low, *=Abnormal, C=Critical

INTERPRETIVE INFORMATION: Ribosomal P Protein Ab, IgG

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

Autoantibodies reacting with cytoplasmic ribosomes are highly specific for systemic lupus erythematosus (SLE). Ribosomal-P antibodies are found in approximately 12% of patients with SLE and in 90% of patients with lupus psychosis; titers often increase more than five fold during and before active phases of psychosis.

SSA-52 (Ro52) (ENA) Antibody, IgG	3 AU/mL	(Ref Interval: 0-40)

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.

SSA-60 (Ro60) (ENA) Antibody, IgG	3 AU/mL	(Ref Interval: 0-40)

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

Smith/RNP (ENA) Ab, IgG	**143 Units H**	**(Ref Interval: 0-19)**

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

19 Units or Less ..... Negative
20 to 39 Units ..... Weak Positive
40 to 80 Units ..... Moderate Positive
81 Units or greater ..... Strong 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.

Jo-1 (Histidyl-tRNA Synthetase) Ab, IgG	1 AU/mL	(Ref Interval: 0-40)

H=High, L=Low, *=Abnormal, C=Critical

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).

SSB (La) (ENA) Antibody, IgG

4 AU/mL (Ref Interval: 0-40)

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.

Scleroderma (Scl-70) (ENA) Antibody, IgG

2 AU/mL (Ref Interval: 0-40)

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.

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.

H=High, L=Low, *=Abnormal, C=Critical

VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
Smith (ENA) Antibody, IgG	23-271-140225	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Centromere Ab, IgG	23-271-140225	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Ribosome P Antibody, IgG	23-271-140225	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
SSA-52 (Ro52) (ENA) Antibody, IgG	23-271-140225	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
SSA-60 (Ro60) (ENA) Antibody, IgG	23-271-140225	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Smith/RNP (ENA) Ab, IgG	23-271-140225	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Jo-1 (Histidyl-tRNA Synthetase) Ab, IgG	23-271-140225	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
SSB (La) (ENA) Antibody, IgG	23-271-140225	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Scleroderma (Scl-70) (ENA) Antibody, IgG	23-271-140225	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00

END OF CHART

H=High, L=Low, *=Abnormal, C=Critical