

Product Specification Sheet

Y <b>Cat. # 3300-140-N01</b>	Anti-Human Scl70 protein Human Anti-Scl-70 (Scleroderma 70 Kda/ DNA-topoisomerase-1) IgG -ve control serum	<b>Size:</b> 2 ml (or bulk)
Y <b>Cat. # 3300-140-P02</b>	Anti-Human Scl70 protein Human Anti-Scl-70 (Scleroderma 70 Kda/ DNA-topoisomerase-1) IgG +ve control serum	<b>Size:</b> 2 ml (or bulk)

The Scl-70 or DNA topoisomerase I antigen is an abundant nuclear protein. In human tissues the DNA topoisomerase I is initially synthesized as a protein with a molecular weight of 100 kDa. Most of this precursor is then proteolytically processed to a 70-kDa size, from which the Scl-70 antigen has derived its name.

Anti-Scl-70 antibodies were originally described as precipitating autoantibodies in sera of patients with a connective tissue disease. It was later realized that some patients with diffuse scleroderma characteristically have a high incidence of this autoantibody.

The presence of autoantibodies against the Scl-70 antigen has been reported to have prognostic value in the diagnosis of diffuse scleroderma, also termed Progressive Systemic Sclerosis. It has also been reported that autoantibodies to Scl-70 are a specific serologic marker for Systemic Sclerosis, and present in high proportions of Acrosclerosis. Anti-Scl-70 is not usually present in other autoimmune rheumatic diseases unless some cutaneous symptoms of scleroderma are present.

**Source of Scl-70 Controls**

Human anti-Scl-70 serum or plasma are obtained from FDA-approved blood collection center and tested for anti-Scl-70 antibodies. The anti-Scl-70 positive samples are Confirmed positive by Bio-Rad BioPlex Scl-70 > 8.0 AI (Antibody Index), MarDx Hep2 Western Blot positive 95-100 kD Bands, IFA Hep2 Homogeneous and Speckled Nucleolar pattern. The negative and positive serum or plasma are from single donor or pooled to product bulk lots. Individual lots may vary in antibody concentration and should be individually tested for use in ELISA or western or other applications.

All human derived material has been tested negative for HIV, HCV, and HbSAg. Nevertheless, all precautions should be taken and samples be treated as potentially hazardous.

**Form & Storage**

**Short-term:** unopened, undiluted vials for less than a week at 4oC.

**Long-term:** at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20oC or below.

**Shipping:** 4oC for solutions and room temp for powder.

**Recommended Usage**

**Western Blotting** (1:500-1:5K using ECL technique).

**ELISA:** Control antigen can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (0.5-1 ug/ml for affinity pure).

**Specificity & Cross-reactivity**

Anti-Scl70 antibody reacts with human Scl70 protein. Antibody cross-reactivity in various species has not been studied. Recombinant purified human Scl70 (#SCL701-C) is available as a control for Western.

**General References:** 1. Maul GG, PNAS 83: 1986, 5145-5149; Douvas AS, J Biol Chem 1989, 10514-10522; Shero JH, Science 231: 1986, 737-740; Jarzabek-Chorzelska M, British J of Dermatology 1986, 393-401.

\*This product is for In vitro research use only.

**Related material available from ADI**

Catalog#	ProdDescription
3300-100-SMG	Human Anti-Smith antigen (Sm) IgG ELISA kit, 96
3300-110-SRG	Human Anti-Smith antigen/RNP (Sm/RNP) IgG ELISA kit, 96 tests, Quantitative
3300-120-RNG	Human Anti-RNP (RNP-70) IgG ELISA kit, 96 tests,
3300-130-HNG	Human Anti-histones IgG ELISA kit, 96 tests,
Human Anti-Scl-70 (Scleroderma 70 Kda/DNA-topoisomerase-1) IgG ELISA	
3300-150-JOG	Human Anti-Jo-1 (Scleroderma 70 Kda/DNA-topoisomerase-1) IgG ELISA kit, 96 tests, Quantitative
3300-160-AFG	Human Anti-Alpha Fodrin IgG ELISA kit, 96 tests,
3300-170-CLG	Human Anti-Cardiolipin IgG ELISA kit, 96 tests,
3300-175-CLM	Human Anti-Cardiolipin IgM ELISA kit, 96 tests,
3300-185-CLA	Human Anti-Cardiolipin IgA ELISA kit, 96 tests,
3300-190-B2G	Human Anti-Beta2-Glycoprotein 1 IgG ELISA kit, 96
3300-195-B2M	Human Anti-Beta2-Glycoprotein 1 IgM ELISA kit, 96
3300-200-B2A	Human Anti-Beta2-Glycoprotein 1 IgA ELISA kit, 96
3300-205-APS	Human Anti-Phospholipid Screen (anti-Phosphatidyl Serine, Phosphatidyl Inositol, Phosphatidic Acid and beta-2-Glycoprotein I) IgG/IgM ELISA kit, 96 tests, Quantitative
3300-210-PSS	Human Anti-Phosphotidyl serine IgG/IgM ELISA kit
3300-215-PIS	Human Anti-Phosphotidyl Inositol IgG/IgM ELISA kit,
3300-220-PAS	Human Anti-Phosphotidic Acid IgG/IgM ELISA kit, 96
3300-230-APG	Human Anti-Prothrombin IgG/IgM ELISA kit, 96 tests,
3300-235-APA	Human Anti-Prothrombin IgA ELISA kit, 96 tests,
3300-240-AVA	Human Anti-Annexin V IgG ELISA kit, 96 tests,
3300-250-ANG	Human ANCA Screen (Anti-PR3 and Anti-MPO) IgG ELISA kit, 96 tests, Quantitative
3300-255-PRG	Human ANCA (Anti-PR3) IgG ELISA kit, 96 tests,
3300-140-N01-Human-Anti-Scl-70-IgG-Positive-Control	150720A

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