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**TEST: dsDNA, ssDNA, HISTONES & Scl-70 ANTIBODIES**

**PRINCIPLE:**

The demonstration of the DNA-Histone antinuclear antibodies is used as a diagnostic tool in the management of rheumatic diseases. These autoantibodies react with a variety of nuclear constituents, including polynucleotides, histones, nonhistone proteins, nucleolar antigens and compounds of the nuclear matrix. Some DNA antibodies can be regarded as marker antibodies for certain inflammatory rheumatic diseases. Furthermore, the different diseases and their subsets seem to have their own DNA profiles.

This ELISA detects antibodies to the auto-antigens double-stranded (ds)-DNA, single-stranded (ss)-DNA, histones and Scl-70 antigens in serum.

**SPECIMEN REQUIREMENTS:**

Collect one 10 ml red top blood collection tube by standard venipuncture techniques. Do not draw specimen in tubes containing any preservative or anticoagulant. The serum should be separated from the clot; spin clotted blood at 1600 rpm for 10 minutes. Serum can be stored at room temperature for up to 8 hours or can be stored at 2-8°C for up to 48 hours. Store at -20°C or below if testing is delayed further.

Send frozen serum on dry ice. Do not freeze in self-defrosting freezers. Avoid repeated freeze-thawing. Microbially contaminated, heat-treated, hemolyzed, lipemic or specimens containing visible particulate should not be used. Minimum volume needed is 100 µl of serum.

**METHOD:**

Enzyme Linked Immunoassay (ELISA).

**REFERENCES:**

1. Profiles of Antibodies to Histones, DNA and Igb in Patients with Systemic Rheumatic Diseases Determined by ELISA. M. Gripenberg, T. Helve, and P. Kurki, J. Rheumat. December 5, 1985.
2. Detection of Clinical Relevance of Anti-DNA/anti-ENA Antibodies. A.C. Horsall, Immunol-Today 9: 159, 1988.

**Normal Range: Negative.**

**Results are reported as negative, borderline or positive.**

**Panel includes antibodies to:**

**dsDNA**  
**ssDNA**  
**Histones**  
**Scl-70**

**Turnaround Time: 7-10 business days**