

## **TEST: ANTI-NUCLEAR ANTIBODY (ANA) SCREEN AND TITER**

### **PRINCIPLE:**

Autoantibodies in a test serum bind to homologous antigens in the substrate (HEp-2 cells) and can be detected by FITC-anti-human immunoglobulin. A positive ANA result usually occurs in a number of autoimmune disorders such as systemic lupus erythematosus (SLE), mixed connective tissue disease (MCTD), rheumatoid arthritis (RA), Sjogren's syndrome (SS), and progressive systemic sclerosis (PSS). High titers of anti-nDNA, one type of ANA, are associated with SLE. The titer of the anti-nDNA may decrease with successful therapy and increases in acute recurrence of the disease. Also, DNA-anti-DNA immune complexes play a role in the pathogenesis of SLE through the deposit of the complexes in the kidney and other tissues. For these reasons, the detection and quantitation of anti-nDNA is diagnostically and therapeutically helpful in patients suspected or known to have SLE or other connective tissue diseases.

### **SPECIMEN REQUIREMENTS:**

**2ml serum collected in a red top tube with no additive or in a serum separator tube (gel barrier).** Serum may be separated from the clot to avoid hemolysis. Store at 2-10°C up to one week. If testing is further delayed, sera should be frozen at 20°C or lower. Minimum volume needed is 300 µl.

**METHOD:** Indirect Immunofluorescence

### **REFERENCES:**

Fritzler, M. Immunofluorescent Antinuclear Antibody Tests, in Manual of Clinical Immunology Laboratory, Rose, Friedman and Fahey, eds., 2nd Edition, 1980, pp. 732-739.

**Normal Range: Negative**

**Positive screens will be titered and results will include titer and pattern.**

**Turnaround Time:** One Week