ANTI-CHROMATIN ANTIBODIES

ANTI-NUCLEOSOME ANTIBODIES

Anti-Chromatin Antibodies (Anti-Nucleosome Abs) are felt to occur in SLE before the appearance of Anti-Double Strand DNA Antibodies. Chromatin appears to be a major immunogen in SLE. Modification of chromatin during apoptosis may alter the antigen's structure, allowing these molecules to bypass impaired tolerance mechanisms in SLE Impaired removal of apoptotic cells may also play a role in SLE and allow the accumulation of auto-antigen (chromatin) which then may enable induction of Anti-Chromatin/Nucleosome Abs.

The clinical utility is being defined, but there are several potential areas where they may be extremely useful as shown below.

- Suspected SLE that is Anti-dsDNA Antibody negative. Recent studies have shown that 65% of Anti-DNA negative SLE patients were Anti-Chromatin Antibody positive.
- They appear to be more highly related to lupus nephritis than Anti-DNA Antibodies.
- They are useful in the evaluation of drug-induced LE and appear to be more specific and sensitive than Anti-Histone Antibodies.
- The specificity appears excellent, but they can be found occasionally in RA, MCTD and PSS, but usually absent in other autoimmune diseases.

The **Anti-Chromatin Antibody** assay is incorporated into the existing **ANA 12 Profile** and can also be ordered independently.

RDL Reference Laboratory

Creative Solutions for Complex Medicine

10755 Venice Blvd | Los Angeles, CA 90034 | 310.253.5455 | 800.338.1918 | fax 310.253.5466 | www.rdlinc.com