



TEST: ANTI-PHOSPHOLIPID ANTIBODIES PANEL

PRINCIPLE:

Several diseases have been correlated with the presence of antibodies to phospholipids, particularly cardiolipin. With the development of sensitive methods for the estimation of various anti-phospholipid antibodies (among which anti-cardiolipin antibodies are the most frequently assayed), the clinical associations of these antibodies with thromboembolic disease, thrombocytopenia, SLE, or even recurrent spontaneous abortions (fetal loss) have become apparent. The association of a biological false-positive test for syphilis, lupus anticoagulant, and anti-cardiolipin antibodies has been demonstrated. A solid-phase ELISA assay for anti-cardiolipin antibodies and other anti-phospholipid antibodies is both sensitive and semi-quantitative.

SPECIMEN REQUIREMENTS:

2 ml serum collected in a red top tube with no additive or in a serum separator tube (gel barrier). Keep at room temperature or frozen (see below). Serum may be separated from the clot. Minimum volume needed is 200 μ l.

If not tested or sent within 24 hours, spin clotted blood at 1600 rpm for 10 minutes. Separate serum and freeze at -70°C or below. Send frozen serum on dry ice. Do not freeze in self-defrosting freezers. Avoid repeated freeze-thawing.

METHOD:

Enzyme Linked Immunosorbent Assay (ELISA).

REFERENCES:

1. Harris, E.N., Gharavi, A.E., Patel, S.P. and Hughes, G. Evaluation of the Anti- cardiolipin Antibody Test: Report of an International Workshop held April 4, 1986. Clin. Exp. Immunol. 68: 215, 1987.
2. Gilman-Sachs, A., Lubinski, J., Beer, A.E., Brend, S. and Beaman, K.D. Patterns of anti-phospholipid antibodies. J. Clin. Lab. Immunol. 35:83-88, 1991

Normal Range:

Negative

Results are reported as negative, borderline, positive or high positive

Borderline: > 2 SD of the mean

Positive: > 3 SD of the mean

High Positive: > 7 SD of the mean

Anti-phospholipid antibody panel includes:

Anti-cardiolipin antibody

Anti-phosphatidylserine antibody

Anti-phosphatidylethanolamine antibody

Anti-phosphatidic acid antibody

Anti-phosphatidylglycerol antibody

Anti-phosphatidylinositol antibody

Each tested with IgG/IgM/IgA antibodies (total 18 antibodies in the panel)

Turnaround Time: 7-10 business days