

Cardiolipin Antibody-IgG OR IgM – [Serum] Analysis

Objective

The objective of this test is to detect and quantify IgG or IgM antibodies against cardiolipin in serum. These antibodies are important markers for antiphospholipid syndrome (APS), which is associated with thrombotic events, recurrent pregnancy loss, and autoimmune diseases.

Materials and Methods

Materials:

- Serum sample from patient
- ELISA kits for cardiolipin IgG and IgM antibodies
- Microplate reader and washing equipment
- Standard laboratory equipment (pipettes, centrifuge)

Methods:

1. Sample Collection: Collect venous blood and separate serum by centrifugation.
2. Antibody Detection: Perform ELISA to quantify IgG and IgM cardiolipin antibodies.
3. Interpretation: Elevated antibody levels indicate possible APS; confirm with repeat testing and clinical correlation.
4. Quality Control: Use positive and negative controls to ensure assay validity.
5. Correlation: Combine with lupus anticoagulant and other antiphospholipid antibody tests for comprehensive evaluation.

Results

- Negative: Antibody levels below cutoff (no evidence of APS)
- Positive: Elevated IgG or IgM cardiolipin antibodies suggest APS or related autoimmune disorders
- High titres: Associated with increased risk of thrombosis and pregnancy complications

Conclusion

Detection of cardiolipin IgG or IgM antibodies is critical for diagnosing antiphospholipid syndrome and assessing thrombotic risk. Results should be interpreted alongside clinical history and other antiphospholipid antibody tests.