
Lab Dept: Serology

Test Name: DOUBLE-STRANDED DNA IGG ANTIBODY

General Information

Lab Order Codes: DSDAB

Synonyms: DNA Double-Stranded (ds-DNA) Antibody, IgG, Serum; Anti-DNA; Anti-dsDNA; Anti- Native DNA; Double Stranded DNA; ds-DNA antibody; IgG Anti-DS DNA Antibody; dsDNA Aby

CPT Codes: 86225 – Deoxyribonucleic acid (DNA) antibody; native or double stranded

Test Includes: Double-stranded DNA antibody, IgG level reported in IU/mL.

Logistics

Test Indications: Useful for evaluating patients with clinical features or at-risk for systemic lupus erythematosus (SLE) and for monitoring disease activity, as an adjunct test, in patients with SLE previously positive for double-stranded DNA IgG antibodies.

Lab Testing Sections: Serology - Sendouts

Referred to: Mayo Clinic Laboratories (Test: ADNA1)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 - 4 days

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: SST (Gold, marble or red) tube

Alternate: Red no gel

Draw Volume: 1.0 mL (Minimum: 1.0 mL) blood

| | |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Processed Volume: | 0.3 mL (Minimum: 0.3 mL) serum |
| Collection: | Routine venipuncture |
| Special Processing: | Lab Staff: Centrifuge specimen, remove serum aliquot into screw-capped round bottom plastic vial. Store and ship specimen refrigerated. Forward promptly. Specimen stable refrigerated (preferred) or frozen for 21 days. |
| Patient Preparation: | None |
| Sample Rejection: | Mislabeled or unlabeled specimens |

Interpretive

Reference Range:

| | |
|--------------------------------|----------|
| All ages: | |
| <100.0 IU/mL | Negative |
| ≥ 100.0 IU/mL | Positive |
| Negative is considered normal. | |

Critical Values: N/A

Limitations: Measurements of IgG antibodies to double-stranded DNA (dsDNA) are semiquantitative. Slight changes in reactivity of these antibodies should not be relied upon to predict changes in the clinical course of patients with systemic lupus erythematosus (SLE). Clinical flares of disease in patients with SLE may not be accompanied by changes in the reactivity of dsDNA antibodies. Thus, anti-dsDNA antibody results alone are not sufficient to guide disease management.

Weak-positive results may not correlate with a diagnosis of SLE. Confirmation with *Crithidia luciliae* indirect immunofluorescence test (CLIFT), which is more specific for SLE, may be useful to establish or exclude the diagnosis in certain circumstances.;

A weak-positive dsDNA IgG result by enzyme-linked immunosorbent assay and a CLIFT-negative result may suggest early disease, remission, or false-positive results.

False-positive results are usually of low titers.

A negative result does not exclude a diagnosis of SLE.

Methodology: Enzyme-Linked Immunosorbent Assay (ELISA)

References:

[Mayo Clinic Laboratory](#) January 2024

Updates:

1/23/2024: Initial entry. The reference lab implemented a new kit requiring a change in test code and reference ranges. Replaced Children's Minnesota lab order code DSD.