
Lab Dept: Serology

Test Name: BETA-2 GLYCOPROTEIN 1 (IgG, IgM) ANTIBODY PANEL

General Information

Lab Order Codes: B2GP1

Synonyms: B2GP1 (Beta-2 Glycoprotein 1); Beta-2 GP1 Ab Panel, Serum; Beta 2 GP1 Ab IgG; Beta 2 GP1 Ab IgM

CPT Codes: 86146 x 2 - Beta 2 glycoprotein 1 antibody, each

Test Includes: Beta 2 GP1 Ab IgG, and IgM antibodies

Logistics

Test Indications: Testing for beta-2 GP1 antibodies may be useful in the following clinical situations:

- Unexplained arterial or venous thrombosis
- A history of pregnancy morbidity defined as 1 or more unexplained deaths of a morphologically normal fetus beyond the 10th week of gestation, 1 or more premature births before 34 weeks of gestation caused by severe preeclampsia or placental insufficiency, or 3 or more unexplained, consecutive spontaneous abortions before the 10th week of gestation with no identifiable maternal hormonal or anatomic, or maternal or paternal chromosomal causes.
- Presence of an unexplained cutaneous circulatory disturbance, eg, livido reticularis or pyoderma gangrenosum.
- Unexplained thrombocytopenia or hemolytic anemia
- Possible nonbacterial, thrombotic endocarditis

Lab Testing Sections: Serology - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: B2GMG)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 6 days, performed Monday - Saturday

Special Instructions: N/A

Specimen

Specimen Type:	Blood
Container:	SST (Gold, marble or red)
Draw Volume:	1.5 mL (Minimum: 1.2 mL) blood
Processed Volume:	0.5 mL (Minimum: 0.4 mL) serum
Collection:	Routine venipuncture
Special Processing:	Lab Staff: Centrifuge specimen, remove serum aliquot into a plastic screw-capped vial. Store and ship at refrigerated temperatures. Serum specimen stable refrigerated (preferred) and frozen for 21 days.
Patient Preparation:	None
Sample Rejection:	Mislabeled or unlabeled specimens; gross hemolysis; gross lipemia

Interpretive**Reference Range:**

IgG Range (All ages)	Interpretation
<15.0 SGU/mL	Negative
15.0 - 39.9 SGU/mL	Weakly positive
40.0 – 79.9 SGU/mL	Positive
≥80.0 SGU/mL	Strongly positive
Results are reported in standard IgG anti-beta 2 GP1 units (SGU)	

IgM Range (All ages)	Interpretation
<15.0 SMU/mL	Negative
15.0 - 39.9 SMU/mL	Weakly positive
40.0 – 79.9 SMU/mL	Positive
≥80.0 SMU/mL	Strongly positive
Results are reported in standard IgM anti-beta 2 GP1 units (SMU)	

Critical Values:

N/A

Limitations:

The immunoassay for beta-2 glycoprotein (beta-2 GP1) antibodies does not distinguish between autoantibodies and antibodies produced in response to infectious agents or as epiphenomena following thrombosis. For this reason, a single positive test result is not sufficient to meet accepted serologic criteria for the diagnosis of antiphosphid syndrome.

Comparative studies and interlaboratory proficiency surveys indicate that results of beta-2 GP1 antibody tests can be highly variable and results obtained with different commercial immunoassays may yield substantially different results.

Methodology:

Enzyme-Linked Immunosorbent Assay (ELISA)

References:[Mayo Medical Laboratories](#) March 2023**Updates:**

7/9/2014: IgA is no longer performed as a part of this panel. Current guidelines include only IgG/IgM isotypes for the classification of antiphosphid syndrome (APS).

3/1/2017: Reference range change due to implementation of new kit.

3/15/2023: Units of measure changed for IgM and IgG, added specimen stability.
