

Division of Laboratory Medicine

Immunology

Beta 2 Glycoprotein (IgG and IgM)

General information

Anti-phospholipid syndrome (APS) is an acquired autoimmune condition. The clinical features are venous, arterial and microvascular thrombosis and/or pregnancy complications. Testing for β_2 GP1 antibodies can be helpful for APS diagnosis, particularly when anti-cardiolipin antibodies and lupus anticoagulant are negative and APS is strongly suspected.

Specimen transport: At room temperature

Repeat frequency: The British Society for Standards Clinical Haematology guidelines requires anticardiolipin, lupus anticoagulant or Anti- β_2 -glycoprotein I to be present on two or more occasions at least 12 weeks apart to diagnose anti-phospholipid syndrome antibody.

Special precautions: None

Laboratory information

Reference range	Normal
IgG β₂GP1	0-19.9 kU/l
IgM β ₂ GP1	0-19.9 kU/l

Volume and sample type: 4ml serum

Method: Multiplex flow immunoassay

Turnaround time (calendar days from sample receipt to authorised result): Median: 1

EQA scheme: UK NEQAS Scheme for Phospholipid antibodies.

Clinical information

Indications for the test: This test should be used when investigating a patient for anti-phospholipid syndrome. The clinical features of anti-phospholipid syndrome are detailed above.

Factors affecting the test: β2GP1 antibodies should not be relied upon as a diagnostic tool but must be used in conjunction with evaluation of clinical, pathological and imaging features.

References:

- https://b-s-h.org.uk/guidelines/guidelines/guidelines/guidelines-on-the-investigation-and-management-of-antiphospholipid-syndrome
- International Consensus Guidelines on Anticardiolipin and Anti-β₂-Glycoprotein I Testing

(Last updated September 2025)