

## APOH

# Recombinant Human Apolipoprotein H/Beta-2-Glycoprotein 1 His

|             |         |           |        |
|-------------|---------|-----------|--------|
| Catalog No. | CRB119A | Quantity: | 5 µg   |
|             | CRB119B |           | 20 µg  |
|             | CRB119C |           | 1.0 mg |

**Alternate Names:** B2G1, BG

**Description:** Apolipoprotein H (APOH), also known as Beta-2-Glycoprotein I (B2G1) is a serum protein with a single polypeptide chain consisting of 326 amino acids and having a molecular weight of 50 kDa. The protein is also known by the alternative name Apolipoprotein H (ApoH) which gives an indication of its phospholipid binding function. Since the detection of APOH as a target of antiphospholipid antibodies in 1990 the discussion about the clinical relevance of APOH is still controversial. It is well established that anticardiolipin antibodies are a very heterogeneous group and that APOH is only one of several potential targets for anticardiolipin antibodies. Nevertheless it is generally accepted that the binding of APOH to anionic lipids or surface is essential for the differential detection of anticardiolipin antibodies associated with autoimmune diseases (versus those associated with infectious diseases like syphilis, tuberculosis, AIDS, etc). The close relationship of APOH antibodies and cardiolipin antibodies may indicate that the APOH isotypes have the same clinical relevance as the cardiolipin isotypes, where IgM, IgG and IgA autoantibodies have been observed and are routinely determined diagnostic targets. APOH antibodies and anticardiolipin antibodies can be detected in patients with arterial and venous thrombosis, recurrent fetal loss, thrombosis and SLE. The titers of anticardiolipin and anti-APOH antibodies usually fluctuate sufficiently that they cannot be used for disease monitoring.

Recombinant Human APOH is a glycosylated, polypeptide chain containing 326 amino acids expressed with a -6x His tag.

|                              |   |
|------------------------------|---|
| <b>Gene ID:</b>              | 350   |
| <b>Protein Accession No:</b> | NP_000033   |
| <b>Source:</b>               | Sf9 cells   |
| <b>Molecular Weight:</b>     | 38.2 kDa (excluding glycosylation); 45 kDa total mass                       |
| <b>Formulation:</b>          | Liquid sterile filtered in 16 mM HEPES, pH 7.2 + 200 mM NaCl + 20% Glycerol |
| <b>Purity:</b>               | >90% by SDS-PAGE  |
| <b>Endotoxin Level:</b>      | <0.1 ng/µg  |

**Applications:**

Western Blot: with monoclonal anti-hexa-His-tag antibody and Goodpasture patient sera. Binds IgA and IgG-type human auto-antibodies, auto-antibodies to Beta-2 glycoprotein 1 recognize conformation dependent and linear epitopes.

Standard ELISA test (checker-board analysis of positive/negative sera panels including a reference calibrator). Use at 0.5-1 µg/ml (depending on the type of ELISA plate and coating buffer).

Suitable for biotinylation and iodination.

The optimal concentration should be determined by the user for each specific application.

**Storage & Stability:**

Stable for four weeks at 2-4°C. For long term storage, store at -20°C. **Avoid repeated freeze-thaw cycles.**

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**

