

**Product Specification Sheet**

**Beta-2 Glycoprotein 1 (B2GP1) Antibodies**

<input type="checkbox"/> <b>Cat. # B2GP13-M</b>	Mouse Monoclonal Anti-Human B2GP IgG aff pure	<b>SIZE:</b> 100 ul
<input type="checkbox"/> <b>Cat. # B2GP14-C</b>	Human B2GP purified protein WB +ve control	<b>SIZE:</b> 100 ul

Beta-2 Glycoprotein (also known as BETA-2-GLYCOPROTEIN I; B2G1 BG; Apolipoprotein H,(Apo-H); (B2GPI) (Beta(2)GPI) (Activated protein C-binding protein) (APC inhibitor) (Anticardiolipin cofactor) is a 50-kDa glycoprotein (human 345 aa, chromosome 17q23) that is synthesized in the liver and secreted into blood (~ 200 µg/mL). B2GP is a carbohydrate-rich plasma protein that is a constituent of several lipoprotein particles. It contains sialylated and galactosylated bi- and triantennary oligosaccharides.

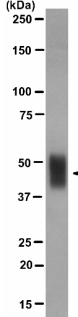
B2GP Binds to various kinds of negatively charged substances such as heparin, phospholipids, and dextran sulfate. It may prevent activation of the intrinsic blood coagulation cascade by binding to phospholipids on the surface of damaged cells. B2GP is a member of the complement control proteins (CCPs or Sushi domains). It consists of 5 CCP repeats in which the first 4 domains are regular repeats consisting of 60 amino acids. The fifth domain is different from the other 4 domains as it consists of 82 amino acids, 4 conserved hydrophobic amino acids (313-316), 3 disulfide bonds instead of 2, and a cluster of positively charged amino acids (282-287), which is responsible for binding of B2GPI to phospholipids.

**Source of Antigen and Antibodies**

<b>Antigen</b>	Purified recombinant human B2G protein
<b>Ab Host/type</b>	Balb/c mouse. Splenocytes were fused with Sp2/0 myeloma cells. Resulting clone (designated B2GP13, isotype IgG2ak), selected for reactivity with B2GP, was expanded into mice as ascites. Antibody has been purified by Protein A/G column chromatography. Supplied in Tris/Cl, pH 7.4, 0.1% BSA and 0.05% azide. Conc is ~1 mg/ml or see lot sp. conc on the vial
<b>2-Ab</b>	<b>Goat Anti-mouse IgG-HRP conjugate Cat # 40320 (AP, biotin, FITC conjugates also available)</b>
<b>-ve control IgG</b>	Cat # 20008-1, Mouse (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

**Isotype Controls for mouse IgG2a**

Catalog#	ProdDescription
20102-102	Mouse IgG2a isotype control, purified
20102-102-B	Mouse IgG2a-Biotin conjugate (isotype)
20102-102-F	Mouse IgG2a-FITC conjugate (isotype)
20102-102-FP	Mouse IgG2a-FITC-PE conjugate
20102-102-HP	Mouse IgG2a-HRP conjugate (isotype)
20102-102-PC5	Mouse IgG2a-PE-Cy5 conjugate (isotype)
20102-102-PE	Mouse IgG2a-PE conjugate (isotype control)



Purified human B2M protein is formulated in SDS-PAGE sample buffer (reduced) to be used as a WB positive control (**Cat # B2GP14-C**) for various anti-B2GP antibodies (**#B2GP13-M**) using Western blotting. It is ready to be loaded on gels after heating (10 ul/lane). If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **B2GP14-C** solution prior to heating and loading on gels. **B2GP14-C** preparation is not intended for quantitative purpose and not to serve as standard of known concentration. It is designed to serve as protein marker and produce good intensity band when used with appropriate ADI antibodies. This protein is not biologically active or and not suitable for ELISA or IP. We supply item # B2GP15-N-25 that is suitable for ELISA etc. Store frozen in suitable aliquots. Do not freeze, thaw, or heat repeatedly.

**Form & Storage of Antibodies/Peptide Control**

**Antibody**

100 ul  solution  lyophilized powder  
Buffer: PBS (pH 7.4 )+0.05% azide

**Storage**

**Short-term:** unopened, undiluted vials for less than a week at 4oC.

**Long-term:** at -20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

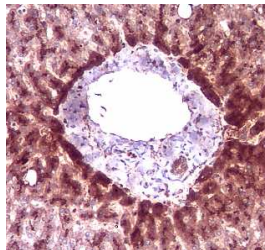
**Stability:** 6-12 months at -20oC or below.

**Shipping:** 4oC for solutions and room temp for lyophilized items.

**Recommended Usage**

**Western Blotting:** Use monoclonal antibody at 1-2 ug/ml using Chemiluminescence technique). B2GP is ~50 kDa. Human serum or purified protein as control.

**ELISA (1:100K; using 50-100 ng control antigen/well).**



**Histochemistry & Immunofluorescence:** paraffin embedded tissues and heat induced antigen retrieval. Human liver as control.

**Specificity & Cross-reactivity**

The antibodies have been tested in human b2GP. Antibody cross-reactivity with mouse and rat and other species not tested. Purified human B2GP protein for western blot +ve control can be used a positive control to identify the appropriate B2GP band or as a standard in ELISA.

**General References:** (1). Lozier J (1984) PNAS 81, 3640; Mehdi H (1991) Gene 108, 293; Sanghera DK (1997) Hum. Molec. Genet. 6, 311; Sheng H (1997) Genomics 41, 128-130; Matsuura E (1992) J. Immunol. 148, 3885; McNeil HP (1990) PNAS 87, 4120;

\*This product is for in vitro research use only.

B2GP13-M 140811P

**India Contact:**

**Life Technologies (India) Pvt. Ltd.**

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi - 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444  
Email: [customerservice@lifetechindia.com](mailto:customerservice@lifetechindia.com) Website: [www.lifetechindia.com](http://www.lifetechindia.com)