

Goat anti-human Apolipoprotein-H (β_2 GPI)

Whole IgG from antiserum

5 mg

Product #: GAB2G-IG

Lot #: XXXX

Expiry date: XXXX

Store at -10 to -20°C

For Research Use Only.

Not for use in diagnostic procedures.

Description of apolipoprotein-H (β_2 GPI)

Apolipoprotein-H, also known as β_2 -Glycoprotein I (β_2 GPI), is a plasma glycoprotein that circulates at a concentration of 200 $\mu\text{g/ml}$ (4 μM). Synthesized in the liver, β_2 GPI is a single chain molecule of 48 kDa, consisting of five repeating internally disulphide-bonded structures referred to as sushi domains. Relative to other glycoproteins, β_2 GPI has an unusually high content of cysteine (6.2%), proline (8.3%) and carbohydrate (19%). Almost half the circulating β_2 GPI in plasma is associated with lipoproteins of all major fractions. β_2 GPI has been demonstrated to bind negatively charged phospholipids, heparin and platelets. Although the precise function(s) are as yet unknown, β_2 GPI has been demonstrated to interfere with blood coagulation by competitively binding to negatively charged phospholipid surfaces exposed during cell activation or damage. Recent evidence also implicates β_2 GPI as a cofactor recognized by anti-phospholipid antibodies present in some autoimmune disorders such as systemic lupus erythematosus (SLE)¹⁻³.

REFERENCES and REVIEWS

1. Lee, NS, Brewer HB Jr., Osborne JC Jr.; β_2 Glycoprotein I: Molecular Properties of an Unusual Apolipoprotein, Apolipoprotein H; JBC 258, pp 4765-4770, 1983.
2. Schousboe I; β_2 Glycoprotein I: A Plasma Inhibitor of the Contact Activation of the Intrinsic Blood Coagulation Pathway. Blood 66, pp 1086-1091, 1985.
3. Nimpf J, Bevers EM, Bomans PHH, Till U, Wurm H, Kostner GM, Zwaal RFA; Prothrombinase activity of human platelets is inhibited by β_2 Glycoprotein I; Biochimica et Biophysica Acta 884, pp 142-149, 1986.

Product Specifications

Description:

Vial containing XXXX ml of whole IgG representing approximately 1 ml of antiserum. Total protein is 5 mg.

Format:

Whole IgG, clear liquid.

Host Animal:

Goat

Immunogen:

Human β_2 GPI purified from plasma.

Concentration:

IgG concentration is XXXX mg/ml, determined by absorbance using an extinction coefficient ($E^{1\%}_{280}$) of 13.4.

Buffer:

10 mM HEPES, pH 7.4, 150 mM NaCl, 50% (v/v) glycerol.

Storage:

Store between -10 and -20°C . Product will become viscous but will not freeze. Avoid storage in frost-free freezers. Keep vial tightly capped. Allow product to warm to room temperature and gently mix before use.

Specificity:

This antibody is specific for β_2 GPI as demonstrated by immunoelectrophoresis and ELISA.

Applications:

Suitable as a source of antibodies to human β_2 GPI.

Neutralizing activity:

Not determined

Species Cross Reactivity: (immunodiffusion vs. citrated plasma)

Human:	XXXX	Mouse:	XXXX	Rat:	XXXX
Rabbit:	XXXX	Pig:	XXXX	Dog:	XXXX