

## Anti-human Apolipoprotein-H, Goat Affinity-Purified IgG, 0.50 mg

Reference Number: 5D-11108G

Lot Number: xxxxxx

Expiration Date: xxxx-xx

For Research Use Only

Not for Use in Diagnostic Procedures

For in vitro Use Only

<b>Immunogen:</b>	Human $\beta$ 2GPI (from plasma)			
<b>Format:</b>	Affinity Purified IgG in 10 mM HEPES / 150 mM NaCl / 50% (v/v) glycerol / pH 7.2			
<b>Host:</b>	Goat			
<b>Storage:</b>	Store between -10 and -20°C. Vial should be tightly capped. Do not store in frost-free freezers. Allow product to warm to room temperature and gently mix before use.			
<b>Total Protein:</b>	0.50 mg			
<b>Volume:</b>	1 vial containing 0.25 mL anti-human, affinity purified IgG			
<b>Concentration:</b>	2 mg/mL affinity purified IgG by absorbance; Extinction Coefficient E1%280 = 13.4			
<b>Specificity:</b>	Specificity demonstrated by immunoelectrophoresis and ELISA methods.			
<b>Species Cross Reactivity:</b>	Dog:	n.a.	Human: ++	Mouse: n.a.
	Pig:	n.a.	Rabbit: n.a.	Rat: n.a.
<b>Application:</b>	Suitable as a source of enriched antibodies For Research Use Only. Not for Use in Diagnostic Procedures. For in vitro use only.			

Human Apolipoprotein-H, also known as  $\beta$ 2-Glycoprotein I ( $\beta$ 2GPI), is a plasma glycoprotein that circulates at a concentration of 200  $\mu$ g/ml (4  $\mu$ M). Synthesized in the liver,  $\beta$ 2GPI is a single chain molecule of 48 kDa, consisting of five repeating internally disulphide-bonded structures. Relative to other glycoproteins,  $\beta$ 2GPI has an unusually high content of cysteine (6.2%), proline (8.3%) and carbohydrate (19%). Almost half the circulating  $\beta$ 2GPI in plasma is associated with lipoproteins of all major fractions.  $\beta$ 2GPI has been demonstrated to bind negatively charged phospholipids, heparin and platelets. Although the precise function(s) are as yet unknown,  $\beta$ 2GPI 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  $\beta$ 2GPI as a cofactor recognized by anti-phospholipid antibodies present in some autoimmune disorders such as systemic lupus erythematosus (SLE).