Murine Anti-GPIbα

Clone GMA-340

Platelet membrane glycoprotein Ib (GPIbα) is comprised of an α and β subunit linked by disulfide bonds. GPIbα (also known as CD42b) is a 135 kDa membrane protein subunit that binds a variety of adhesive and procoagulant ligands, including von Willebrand factor. Cleavage of GPIbα by the "sheddase" ADAM17 releases the ectodomain glycocalicin into plasma. ADAM17 cleaves GPIbα at Gly464-Val465. Liang *et al.*[1] have shown that the murine monoclonal antibody designated 5G6 (GMA-340) binds the ADAM17 cleavage site and blocks glycocalicin release.

Description

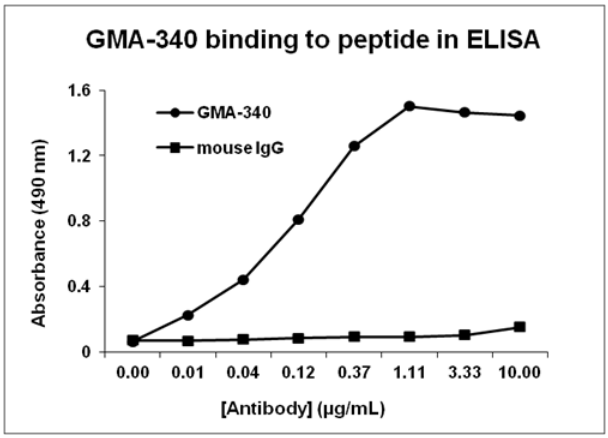
Antibody Source:	mouse monoclonal, IgG_1
Antigen Species Bound:	human
Specificity:	ADAM17 cleavage site on GPIbα.[1]
Immunogen:	Human GPIbα peptide (Ac-ELDQPPKLRGVLQGHLESSRNDPFC-amide) conjugated to ovalbumin.[1]

Formulation and Storage

Purity:	Purified by protein G affinity chromatography from serum-free cell culture supernatant.
Product Formulation:	Lyophilized from a ≥1 mg/ml solution in 20 mM NaH_2PO_4 0.15 M NaCl, 1.0% (w/v) mannitol, pH 7.4. Concentration determined by absorbance measurement at 280 nm and using an extinction coefficient of 1.4 ($\varepsilon_{0.1\%}$).
Reconstitution:	Reconstitute with deionized water.
Storage:	Store lyophilized or reconstituted and aliquoted material at -20°C for prolonged periods. Avoid freeze-thaw cycles. Alternatively, add 0.02% (w/v) sodium azide to reconstituted solution and store at 4°C.
Country of Origin:	USA
Size Options:	0.1 mg or 0.5 mg

Applications

Working Concentration:	Approximately 1-5 µg/ml. Researcher should titer antibody in specific assay.
ELISA:	Binds immobilized human platelet GPIbα and synthetic peptide.
Immunoblotting:	Blots under reduced and non-reduced conditions.[1]
Inhibition:	Blocks ADAM17 access to cleavage site.



References

[1] X. Liang, S.R. Russell, S. Estelle, L.H. Jones, S. Cho, M.L. Kahn, M.C. Berndt, S.T. Bunting, J. Ware, R. Li. Specific inhibition of ectodomain shedding of glycoprotein Ib by targeting its juxtamembrane shedding cleavage site. (2013). *J Thromb Haemost.* 11(12): 2155–2162.

[2] X. Liang, A.K. Syed, S.R. Russell, J. Ware, R. Li. Dimerization of glycoprotein Ibα is not sufficient to induce platelet clearance. (2015). *J Thromb Haemost.* 14: 381–386.