Product Sheet





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Note:

This product has been generated and purified by Podiceps BV.

Glycoprotein 1b alpha

Catalogue no.: Q114 Clone name: Gp1b-17

Product: VHH directed against human glycoprotein 1b alpha

Target: Glycoprotein 1b alpha (GPlbα), also known as CD42, is a transmembrane protein

of 145 kDa. ¹ Together with GP1bβ, GPIX and GPV, it forms the non-covalent GP1b-V-IX complex on megakaryocytes and platelets. ² Platelet activation results in clearance of GPIb from the platelet surface followed by a slow reappearance to a normal surface expression level within an hour. ³ The GP1b-V-IX complex functions as a receptor for von Willebrand factor, allowing platelet adhesion and platelet plug formation at sites of vascular injury. ⁴ Additionally, GP1b contains a binding site for P-selectin, Mac-1, coagulation factor XI and XII, thrombin and high molecular-weight kininogen. ⁴ Defects in GP1bα can cause serious bleeding diathesis, accompanied by morphological platelet anomalies. A gain-of-function

mutation causes platelet-type von Willebrand disease.5

Source: Immunization with and phage-display selection on purified recombinant

human GP1b α .

Recombinant monoclonal VHH (Llama glama), purified from HEK293-E 253

cells using Nickel excel Sepharose affinity chromatography.

Specificity: Human GPlbα.

Gp1b-17 is directed against the N-terminal leucine-rich repeats within GP1b α and

interferes with the binding of vWF to GP1b $\!\alpha$.

Formulation: Myc-tagged PBS.

Mol. Weight: 14.8 kDa **Ext. Coeff. (ε):** 19240 M⁻¹ cm⁻¹

A₂₈₀ at 1g/L: 1.3

Storage: Shipped on blue ice. Store at 4°C or -20°C (aliquots). Addition of 0.02%

sodiumazide is optional.

Applications: ELISA, flow cytometry (FC)

References:

1 Lopez et al. (1987) PNAS 84(16):5615-9 2 Luo, S-Z. et al. (2007) Blood 109:603 3 Han et al. (2003) J Thromb Haemost 1(10):2206-15 4 Andrews et al (2003) Int J Biochem Cell Biol 35(8):1170-4 5 Ruggeri et al (1980) N Engl J Med 302(19):1047-51