

P150-1

Product Information

Catalog Number: P150-1
Isotype: Rabbit polyclonal IgG
Contents: FITC-labeled immunoglobulin in 20 mM Tris buffer with 137 mM NaCl, 0.5% BSA and 0.09% (w/v) sodium azide
Size: 1.5 ml / 300 tests

For research use only, not for diagnostic or therapeutic use. This product is no medical device.

Specificity: The polyclonal antibody reacts with murine and human von Willebrand factor (vWf), a multimeric plasma protein that is stored in α -granules of platelets and Weibel-Palade bodies of endothelial cells¹. The major receptors for vWf are GPIIb α (CD42b) and activated integrin α IIb β 3 (CD41/61). GPIIb α -vWf interaction can be induced by the snake venom protein botrocetin².

Preparation and Storage: The immunoglobulin was conjugated with FITC under optimum conditions. The solution is free of unbound FITC. Store product undiluted at 4°C and avoid prolonged exposure to light. Stable for one year from date of shipment. Do not freeze.

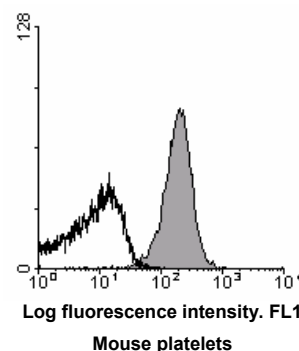
Usage: The antibody preparation is optimized for flow cytometric applications: Use 5 μ l to stain $\sim 10^6$ platelets or $\sim 0.5 \times 10^6$ cells in a recommended volume of 25 μ l. Incubate for 15 minutes at room temperature, stop reaction by addition of 400 μ l PBS and analyse samples within 30 minutes. For immunofluorescent staining of acetone-fixed frozen sections, the appropriate dilution must be determined individually.

Caution: Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer.

Detection of GPIIb α -vWf interaction.

Mouse blood was diluted 1:20 and 25 μ l of this dilution were incubated in the presence (*shaded area*) or absence (*black line*) of 1U/ml botrocetin for 5 min at RT. Subsequently, the samples were stained with 5 μ l FITC-labeled anti-vWf for 15 min and analyzed directly. Platelets were gated by FSC/SSC characteristics.

Note: The interaction of vWf and GPIIb α is completely inhibited in the presence of the anti-GPIIb α antibody, Xia.B2 (emfret Analytics, M043-0)



- References:**
1. Ruggeri ZM. (1999) Structure and function of von Willebrand factor. *Thromb Haemost.* 82(2):576-84.
 2. Bergmeier W, Bouvard D, Eble JA, et al. (2001) Rhodocytin (aggrexin) activates platelets lacking alpha(2)beta(1) integrin, glycoprotein VI, and the ligand-binding domain of glycoprotein Ibalpha. *J Biol Chem.* 276(27):25121-6.