

M050-1

Product Information

Catalog Number: M050-1
Clone / Isotype: Xia.C3/ Rat (Wistar) IgG2a
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 Xia.C3 antibody reacts with mouse GPIIb β (CD42c), a platelet/megakaryocyte-specific 24 kDa polypeptide that is disulfide-linked with GPIIb α (150 kDa) in the membrane. GPIIb is part of the GPIIb-V-IX complex, the platelet receptor for von Willebrand factor (vWf)^{1,2}. In contrast to GPIIb α , GPIIb β is not sensitive to proteolytic cleavage during platelet activation. Therefore, Xia.C3 binds to resting and activated platelets with similar intensity³.

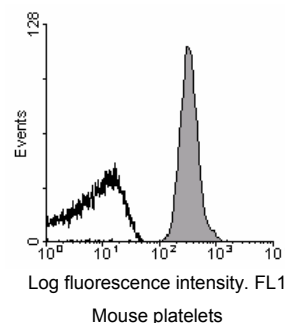
Preparation and Storage: The antibody was purified from hybridoma cell culture supernatant by Protein G-Sepharose chromatography. The antibody was conjugated with FITC under optimum conditions. The solution is free of unbound FITC. Store product undiluted at 4°C and avoid prolonged exposure to light. 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 analyze 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 β on mouse platelets

Mouse blood was diluted 1:20 and 25 μ l of this dilution were stained with 5 μ l control IgG-FITC (emfret Analytics, P190-1, *black line*) or Xia.C3-FITC (*shaded area*) for 15 min at RT and analyzed directly. Platelets were gated by FSC/SSC characteristics.



References:

- Berndt MC, Shen Y, Dopheide SM, et al. (2001) The vascular biology of the glycoprotein Ib-IX-V complex. *Thromb Haemost.* 2001 Jul;86(1):178-88.
- Bergmeier W, Rackebandt K, Schroder W, Zirngibl H, Nieswandt B. (2000) Structural and functional characterization of the mouse von Willebrand factor receptor GPIIb-IX with novel monoclonal antibodies. *Blood.* 95:886-93.
- emfret Analytics. Unpublished results.