FITC-labeled Rat Anti-Mouse Integrin α2 Chain (CD49b) Monoclonal Antibody

M070-1

Product Information

Catalog Number:	M070-1
Clone / Isotype:	Sam.G4 / Rat (Wistar) IgG2b
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.

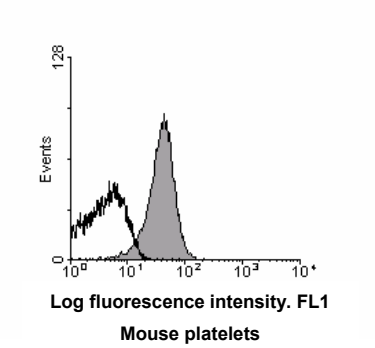
Specificity: The Sam.G4 antibody reacts with the mouse integrin α2 chain (CD49b), the 160-kDa transmembrane glycoprotein that non-covalently associates with the integrin β1 subunit to form the integrin α2β1 complex known as VLA-2. Integrin α2β1, a receptor for collagen and laminin, is expressed on platelets, epithelial cells, and activated lymphocytes[1,2]. The Sam.G4 antibody can block integrin α2β1 binding to collagen[3].

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 µl to stain ~10^6 platelets or ~0.5x10^6 cells in a recommended volume of 25 µl. Incubate for 15 minutes at room temperature, stop reaction by addition of 400 µl 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 α2β1 integrin on mouse platelets
Mouse blood was diluted 1:20 and 25 µl of this dilution were stained with 5 µl control IgG-FITC (emfret Analytics, P190-1, *black line*) or Sam.G4-FITC (*shaded area*) for 15 min at RT and analyzed directly. Platelets were gated by FSC/SSC characteristics.



References:

1. Mendrick, DL and Kelly, DM (1993) *Lab.Invest.* 69:690-702.
2. Mendrick, DL, Kelly, DM, duMont, SS, and Sandstrom, DJ (1995) *Lab.Invest.* 72:367-375.
3. emfret Analytics. Unpublished results.