

M071-1

Product Information

Catalog Number: M071-1
Clone / Isotype: Sam.C1 / 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.C1 antibody reacts with murine integrin $\alpha 2$ chain (CD49b), the 160-kDa transmembrane glycoprotein that non-covalently associates with the integrin $\beta 1$ subunit to form the integrin $\alpha 2\beta 1$ complex known as VLA-2. Integrin $\alpha 2\beta 1$, a receptor for collagen and laminin, is expressed on platelets, epithelial cells, and activated lymphocytes.

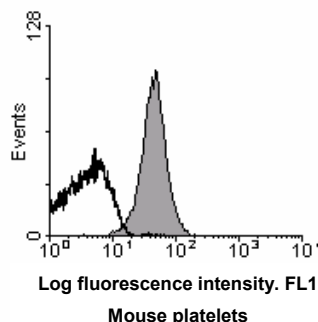
Preparation and Storage: The antibody was purified from hybridoma cell culture supernatant by Protein G-Sepharose chromatography. The antibody was conjugated with FITC under optimum conditions. The solution is free of unbound FITC. Store product undiluted at 4°C and avoid prolonged exposure to light. 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 integrin $\alpha 2$ chain 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 Sam.C1-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.