FITC-labeled Rat Anti-Mouse Integrin α5 chain (CD49e) Monoclonal Antibody

M080-1

Product Information

Catalog Number:	M080-1
Clone / Isotype:	Tap.A12 / Rat (Wistar) IgG1
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.

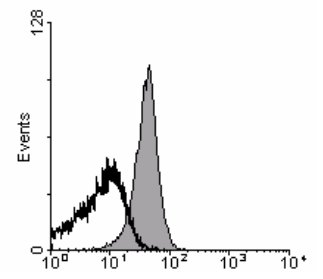
Specificity: The Tap.A12 antibody reacts with murine integrin α5 chain (CD49e), the 135-kDa transmembrane glycoprotein that non-covalently associates with the integrin β1 subunit to form the integrin α5β1 complex, also known as VLA-5. Integrin α5β1, a receptor for fibronectin, is widely expressed in tissue, especially on monocytes, T-cells, endothelial cells, fibroblasts, activated lymphocytes, and to lower extent on platelets and granulocytes[1, 2].

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 integrin α5β1 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 Tap.A12-FITC (*shaded area*) for 15 min at RT and analyzed directly. Platelets were gated by FSC/SSC characteristics.



Log fluorescence intensity. FL1

Mouse platelets

References:

1. Akiyama SK. (1996) Integrins in cell adhesion and signaling. *Hum Cell*. 9(3):181-6.
2. Gruner S, Prostredna M, Schulte V, et al. (2003). Multiple integrin-ligand interactions synergize in shear-resistant platelet adhesion at sites of vascular injury in vivo. Blood. Aug.7