Rat Anti-Mouse CD49d

Overview

Clone: PS/2
Isotype: Rat (Fisher) IgG2b,κ
Immunogen: P815 cells
Specificity: Mouse/Human CD49d; Mr 150 kDa
Alternate Name(s): Integrin α4, VLA-4α, ITGA4, IA4

Description

VLA-4 belongs to the β1-integrin family, which functions both as cell-matrix and cell-cell receptors. As a matrix receptor VLA-4 binds to an alternatively spliced domain of fibronectin, while as a cellular receptor it associates with its counter-receptor ligand VCAM-1. In addition to CD44/Pgp-1, VLA-4 has been shown to be important for lymphopoiesis, and is also believed to be important for extravasation of lymphocytes into sites of inflammation as a second signal in addition to LFA/ICAM-1. CD49d is expressed in low amounts on resting lymphocytes and monocytes, is absent or minimally detectable on stromal cells, whereas virtually all lymphoid and myeloid cells in bone marrow and in long-term culture are positive. Antibody PS/2 also reacts with human VLA-4.

Applications

FC – Quality tested 1,4,7,8
IHC-FS – Reported in literature 2,4
IP – Reported in literature 1
Adhesion – Reported in literature 1,3,6
Block – Reported in literature 1,4,6

Working Dilutions

Flow Cytometry: FITC and BIOT conjugates ≤ 2 μg/10^6 cells
PE conjugates ≤ 0.2 μg/10^6 cells
For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL

Other Applications: Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.
Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. **No preservatives or amine-containing buffer salts added.** Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of PBS. **Aliquot and store at or below -20°C.**
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific (M)SDS.

References