

## Anti-Mouse/Rat CD29 (Integrin beta 1) PE

Catalogue Number : 11312-60

RUO: For Research Use Only. Not for use in diagnostic procedures.

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### Product Information

**Clone:** HMB1-1

**Format/Conjugate:** PE

**Concentration:** 0.2 mg/mL

**Reactivity:** Mouse, Rat

**Laser:** Blue (488nm), Yellow/Green (532-561nm)

**Peak Emission:** 578nm

**Peak Excitation:** 496nm

**Filter:** 585/40

**Brightness (1=dim,5=brightest):** 5

**Isotype:** Armenian Hamster IgG

**Formulation:** Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.

**Storage:** Product should be kept at 2-8°C and protected from prolonged exposure to light.

**Applications:** FC

### Description

The HMB1-1 monoclonal antibody specifically reacts with mouse/rat CD29, a 130 kDA molecule also known as integrin beta 1, GPIIa, and the VLA-beta chain. It is expressed broadly on endothelial cells, epithelial, leukocytes, and smooth muscle. CD29 forms the VLA 1-6 complexes through the non-covalent interaction with the alpha integrins of CD49 a-f. The HMB1-1 antibody is capable of inhibiting T cell proliferation and blocking cell adhesion.

### Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

### Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. For flow cytometric staining, the suggested use of this reagent is ≤1 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

### References

1. Ridger, V. C., Wagner, B. E., Wallace, W. A., ; Hellewell, P. G. (2001). Differential effects of CD18, CD29, and CD49 integrin subunit inhibition on neutrophil migration in pulmonary inflammation.; *The Journal of Immunology*, 166(5), 3484-3490.
2. Noto, K., Kato, K., Okumura, K., ; Yagita, H. (1995). Identification and functional characterization of mouse CD29 with a mAb.; *International immunology*, 7(5), 835-842.
3. Sangaletti, S., Di Carlo, E., Gariboldi, S., Mitti, S., Cappetti, B., Parenza, M., ... ; Colombo, M. P. (2008). Macrophage-derived SPARC bridges tumor cell-extracellular matrix interactions toward metastasis.; *Cancer research*, 68(21), 9050-9059.