SONY

Product Data Sheet

Purified anti-CD29 (Integrin β1)

Catalog # / Size: 5206520 / 100 µg
5206515 / 25 µg

Clone: P5D2

Isotype: Mouse IgG1, κ

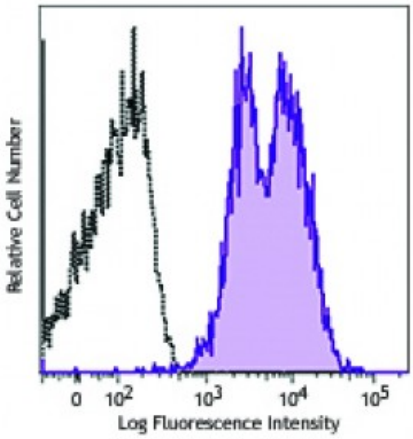
Immunogen: The P5D2 monoclonal antibody was generated against human fibroblast cells (HT1080).

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5



Human peripheral blood lymphocytes were stained with purified anti-CD29 (clone P5D2, filled histogram) antibody or purified mouse IgG1, κ isotype control (open histogram). A goat anti-mouse PE conjugate was used as a secondary antibody.

Applications:

Applications: Neutralization

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤1 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Clone P5D2 interferes with binding of integrin-bearing cells to fibronectin, laminin and collagen but not vitronectin coated surfaces.

P5D2 reacts with the integrin β1 subunit and inhibits the function of all β1 integrins.

Application References:

1. Wayner EA, Hoffstrom BG. 2007. *Meths Enzymol In: Integrins.* 426:117. PubMed
2. Wang HQ, *et al*. 2007. *Eur J Cell Biol.* 86(1):51. (Block) PubMed
3. Da Silva MS, *et al*. 2003. *Surgery*. 134(2):164. (Block) PubMed
4. Blaschke R, *et al*. 2002. *Biochem Biophys Res Commun*. 296(4):890. (Block) PubMed
5. Dittel BN, *et al.* 1993. *Blood.* 81:2272. (FC) PubMed

Description: CD29 is a 130 kD single chain type I glycoprotein also known as integrin β_1, VLA-β chain, or gpIIa. It is broadly expressed on a majority of hematopoietic and non-hematopoietic cells, including leukocytes (although at low level on granulocytes), platelets, fibroblasts, endothelial cells, epithelial cells, and mast cells. CD29 is a member of the integrin family. It is non-covalently associated with integrin α1-α6 chains to form VLA-1 to VLA-6 molecules, respectively. Integrins, which include CD29, bind to several cell surface (e.g. VCAM-1, MadCAM-1) and extracellular

matrix molecules. CD29 acts as a fibronectin receptor and is involved in a variety of cell-cell and cell-matrix interactions.

Antigen References:

1. Long K, *et al*. 2016. *Nat. Commun*. 7:10354. PubMed
2. Campos LS. 2005. *Bioessays*. 27(7):698.