

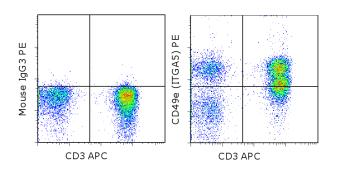
An Affymetrix Company

Anti-Human CD49e (Integrin alpha 5) PE

Catalog Number: 12-4900

Also known as: ITGA5, VLA-5, Fibronectin receptor

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



Staining of normal human peripheral blood cells with Anti-Human CD3 APC (cat. 17-0037) and Mouse IgG3 Isotype Control PE (cat. 12-4742) (left) or Anti-Human CD49e (Integrin alpha 5) PE (right). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Human CD49e (Integrin alpha

5) PE

REF Catalog Number: 12-4900

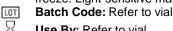
Clone: P1D6

Concentration: 5 uL (0.25 ug)/test **Host/Isotype:** Mouse IgG3

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Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C. Do not freeze. Light-sensitive material.



Use By: Refer to vial
Contains sodium azide



Description

This P1D6 monoclonal antibody reacts with human CD49e, which is also known as integrin alpha 5. Integrins constitute a family of cell surface receptors that mediate adhesion between cells or between a cell and the extracellular matrix. These proteins are heterodimers consisting of two distinct subunits, α and β . Integrin alpha 5 is expressed on thymocytes, T cells, monocytes, platelets, as well as early and activated B cells. Integrins are also expressed on non-hematopoietic and cancer cells. Integrin-mediated adhesion is regulated by changes in ligand affinity (or activation), cell shape, and integrin clustering and diffusion. Integrin alpha 5 undergoes post-translational cleavage in its extracellular domain to produce disulfide-linked light and heavy chains that associate with the common beta 1 subunit to form the fibronectin receptor. Studies have demonstrated the involvement of this integrin in cell adhesion, signaling, and apoptosis.

The P1D6 monoclonal antibody has been reported to have blocking activity. Crossblocking studies indicate that P1D6 and eBioSAM-1 recognize a similar epitope.

Applications Reported

This P1D6 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This P1D6 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 μ L (0.25 μ g) per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test.

References

Oh JE, Kook JK, Min BM. Beta ig-h3 induces keratinocyte differentiation via modulation of involucrin and transglutaminase expression through the integrin alpha3beta1 and the phosphatidylinositol 3-kinase/Akt signaling pathway. J Biol Chem. 2005 Jun 3;280(22):21629-37. (**P1D6**, FC, FG (blocking))



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Matter ML, Zhang Z, Nordstedt C, Ruoslahti E. The alpha5beta1 integrin mediates elimination of amyloid-beta peptide and protects against apoptosis. J Cell Biol. 1998 May 18;141(4):1019-30. (**P1D6**, FC)

Wayner EA, Carter WG, Piotrowicz RS, Kunicki TJ. The function of multiple extracellular matrix receptors in mediating cell adhesion to extracellular matrix: preparation of monoclonal antibodies to the fibronectin receptor that specifically inhibit cell adhesion to fibronectin and react with platelet glycoproteins Ic-IIa. J Cell Biol. 1988 Nov;107(5):1881-91. (P1D6, IHC frozen, FG (blocking))

Related Products

12-4742 Mouse IgG3 Isotype Control PE 17-0037 Anti-Human CD3 APC (OKT3)