

# CD49e (Integrin alpha 5) Monoclonal Antibody (P1D6), PE, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG3
Recommended Isotype Control	Mouse IgG3 Isotype Control (B10), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	P1D6
Conjugate	PE
Excitation/Emission Max	565/576 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_10717080

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	2 Publications

## Product Specific Information

**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, alpha and beta. 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.

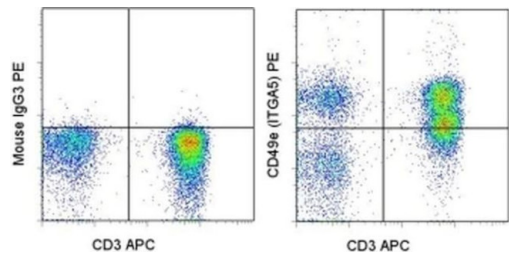
**Applications Tested:** This P1D6 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.25 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup>.

cells/test.

Excitation: 488-561 nm; Emission: 578 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD49e (Integrin alpha 5) Monoclonal Antibody (P1D6), PE, eBioscience™



**CD49e (Integrin alpha 5) Antibody (12-4900-42) in Flow**  
Staining of normal human peripheral blood cells with Anti-Human CD3 APC (Product # 17-0037-42) and Mouse IgG3 Isotype Control PE (Product # 12-4742-42) (left) or Anti-Human CD49e (Integrin alpha 5) PE (right). Cells in the lymphocyte gate were used for analysis.

3 References

Immunocytochemistry (1)

<p>Cancer research</p> <p><b>v6 Integrin Promotes Castrate-Resistant Prostate Cancer through JNK1-Mediated Activation of Androgen Receptor.</b></p> <p>"12490042 was used in immunocytochemistry to describe the crosstalk of alphavbeta6-integrin and androgen receptor in prostate cancer."</p> <p>Authors: Lu H,Wang T,Li J,Fedele C,Liu Q,Zhang J,Jiang Z,Jain D,Iozzo RV,Violette SM,Weinreb PH,Davis RJ,Gioeli D, FitzGerald TJ,Altieri DC,Languino LR</p>	<p>Year 2016</p> <p>Species Human</p>
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Flow Cytometry (2)

<p>mBio</p> <p><b>More Is Not Always Better-the Double-Headed Role of Fibronectin in Staphylococcus aureus Host Cell Invasion.</b></p> <p>"12-4900-42 was used in Flow Cytometry to explain the large differences of S. aureus uptake efficacy in different host cell types as well as in vivo differences between courses of bacterial infections and the localization of bacteria in different clinical settings."</p> <p>Authors: Niemann S,Nguyen MT,Eble JA,Chasan AI,Mrakovcic M,Böttcher RT,Preissner KT,Roßlenbroich S,Peters G, Herrmann M</p>	<p>Year 2021</p> <p>Species Human</p>
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<p>PloS one</p> <p><b>Tetraspanins CD81 and CD82 facilitate 41-mediated adhesion of human erythroblasts to vascular cell adhesion molecule-1.</b></p> <p>"12-4900 was used in Flow cytometry/Cell sorting to investigate whether any tetraspanin could modulate integrin function, showing that tetraspanins CD81 and CD82 facilitate 41-mediated adhesion of human erythroblasts to VCAM-1."</p> <p>Authors: Spring FA,Griffiths RE,Mankelov TJ,Agnew C,Parsons SF,Chasis JA,Anstee DJ</p>	<p>Year 2013</p> <p>Species Human</p>
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