

CD49d (Integrin alpha 4) Monoclonal Antibody (9F10), PE, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human, Rhesus monkey
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	9F10
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_10717245

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	15 Publications

Product Specific Information

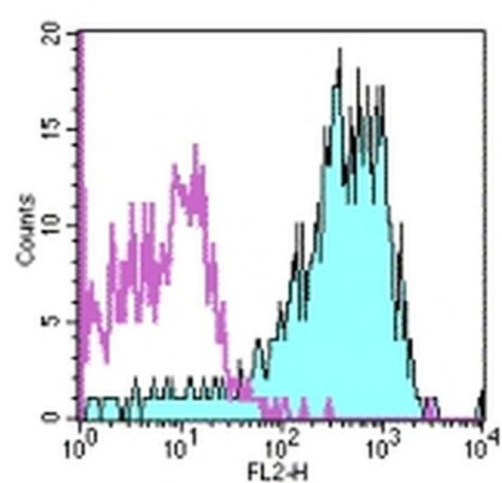
Description: The 9F10 monoclonal antibody reacts with human CD49d, the 150 kDa integrin alpha4 subunit. The complex of CD49d non-covalently associated with integrin beta1 (CD29), also known as VLA-4, is a receptor for fibronectin and VCAM-1 (CD106). This complex is expressed by thymocytes, peripheral lymphocytes, monocytes and eosinophils. CD49d also associates with integrin beta7 and binds to the Mucosal Addressin Cell-Adhesion Molecule-1 (MadCAM-1).

Applications Reported: The 9F10 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 9F10 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.125 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 10⁵ to 10⁸ cells/test.

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

Filtration: 0.2 µm post-manufacturing filtered.



CD49d (Integrin alpha 4) Antibody (12-0499-42) in Flow
Staining of normal human peripheral blood cells with Mouse IgG1 kappa Isotype Control PE (Product # 12-4714-81) (open histogram) or Anti-Human CD49d (Integrin alpha 4) PE (filled histogram). Cells in the lymphocyte gate were used for analysis.

16 References

Immunocytochemistry (1)

PloS one Tetraspanins CD81 and CD82 facilitate 41-mediated adhesion of human erythroblasts to vascular cell adhesion molecule-1. "12-0499 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." Authors: Spring FA,Griffiths RE,Mankelow TJ,Agnew C,Parsons SF,Chasis JA,Anstee DJ	Year 2013 Species Human
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Flow Cytometry (15)

Stem cell research & therapy Mesenchymal stem cell aggregation mediated by integrin 4/VCAM-1 after intrathecal transplantation in MCAO rats. "Published figure using CD49d (Integrin alpha 4) monoclonal antibody (Product # 12-0499-42) in Flow Cytometry" Authors: Ran Y,Dong Y,Li Y,Xie J,Zeng S,Liang C,Dai W,Tang W,Wu Y,Yu S	Year 2022
Communications biology Identification of potential chemical compounds enhancing generation of enucleated cells from immortalized human erythroid cell lines. "Published figure using CD49d (Integrin alpha 4) monoclonal antibody (Product # 12-0499-42) in Flow Cytometry" Authors: Soboleva S,Kurita R,Ek F,Åkerstrand H,Silvério-Alves R,Olsson R,Nakamura Y,Miharada K	Year 2021

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