

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Integrin $\alpha 4$ /CD49d. Recognizes the human Integrin $\alpha 4$ /CD49d subunit.
Source	Monoclonal Mouse IgG ₁ Clone # 7.2R
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	DX-3 human melanoma cell line
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS.

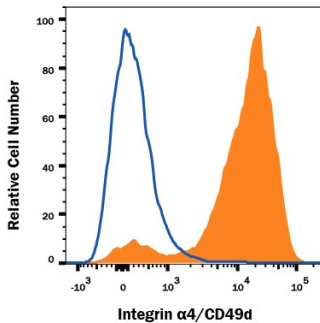
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	0.25 μ g/10 ⁶ cells	See Below
Immunocytochemistry	8-25 μ g/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

Flow Cytometry



Detection of Integrin $\alpha 4$ /CD49d in Human Blood Lymphocytes by Flow Cytometry. Human peripheral blood lymphocytes were stained with Mouse Anti-Human Integrin $\alpha 4$ /CD49d Monoclonal Antibody (Catalog # MAB1354, filled histogram) or isotype control antibody (Catalog # MAB002, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). View our protocol for [Staining Membrane-associated Proteins](#).

Immunocytochemistry



Integrin $\alpha 4$ /CD49d in U937 Human Cell Line. Integrin $\alpha 4$ /CD49d was detected in immersion fixed U937 human histiocytic lymphoma cell line using 10 μ g/mL Mouse Anti-Human Integrin $\alpha 4$ /CD49d Monoclonal Antibody (Catalog # MAB1354) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counter-stained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The $\alpha 4$ subunit, also known as CD49d and VLA-4 α subunit, forms heterodimers with Integrin $\beta 1$ (CD29) or $\beta 7$. Integrins $\alpha 4\beta 1$ and $\alpha 4\beta 7$ are receptors for fibronectin and VCAM. Integrin $\alpha 4\beta 1$ also binds the mucosal addressin cell adhesion molecule (MAdCAM-1).