

Elab Fluor® 647 Anti-Human CD49d Antibody[9F10]

Catalog Number: E-AB-F1144M

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

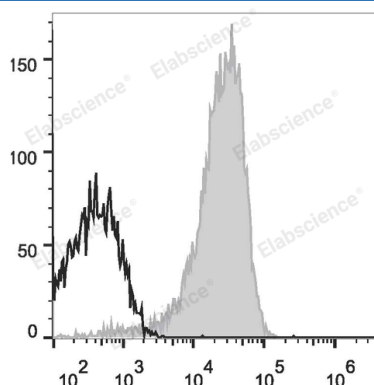
Reactivity	Human
Host	Mouse
Isotype	Mouse IgG1, κ
Clone No.	9F10
Isotype Control	Elab Fluor® 647 Mouse IgG1, κ Isotype Control[MOPC-21] [Product E-AB-F09792M]
Conjugation	Elab Fluor® 647
Conjugation Information	Elab Fluor® 647 is designed to be excited by the Red laser (627-640 nm) and detected using an optical filter centered near 670 nm (e.g., a 660/20 nm bandpass filter).
Storage Buffer	Phosphate buffered solution, pH 7.2, containing 0.09% stabilizer.

Applications

Recommended usage

FCM	Each lot of this antibody is quality control tested by flow cytometric analysis. The amount of the reagent is suggested to be used 5 μL of antibody per test (million cells in 100 μL staining volume or per 100 μL of whole blood). Please check your vial before the experiment. Since applications vary, the appropriate dilutions must be determined for individual use.
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Data



Human peripheral blood lymphocytes are stained with Elab Fluor® 647 Anti-Human CD49d Antibody (filled gray histogram). Unstained lymphocytes (empty black histogram) are used as control.

Preparation & Storage

Storage	Keep as concentrated solution. This product can be stored at 2-8°C for 24 months. Please protected from prolonged exposure to light and do not freeze.
Shipping	Ice bag

Antigen Information

Alternate Names	CD49 antigen-like family member D;CD49d;ITGA4;Integrin alpha-4;Integrin alpha-IV; VLA-4 subunit alpha
Uniprot ID	P13612
Gene ID	3676

For Research Use Only

Background

CD49d is a 150 kD α integrin chain known as $\alpha 4$ integrin or VLA-4 α chain. It forms a heterodimer with either integrin $\beta 1$ ($\alpha 4\beta 1$, VLA-4) or $\beta 7$ ($\alpha 4\beta 7$). CD49d is expressed broadly on T lymphocytes, B lymphocytes, monocytes, thymocytes, eosinophils, basophils, mast cells, NK cells, dendritic cells, and some non-hematopoietic cells, but not on normal red blood cells, platelets or neutrophils. VLA-4 binds to VCAM-1 (CD106) and fibronectin. $\alpha 4\beta 7$ is the receptor for VCAM-1 and MAdCAM-1. CD49d participates in mononuclear cell trafficking to endothelial sites of inflammation and has roles in cell-cell interactions and cell adhesion to extracellular matrices. CD49d is involved in lymphocyte migration, T cell activation, and hematopoietic stem cell differentiation. CD49d is a marker to isolate pure populations of Treg cells due to its absence on Foxp3+ cells.

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