

PE/Cyanine7 Anti-Human CD49d Antibody[9F10]

Catalog Number: E-AB-F1144H

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	PE/Cyanine7 Mouse IgG1, κ Isotype Control[MOPC-21] [Product E-AB-F09792H]
Conjugation	PE/Cyanine 7
Conjugation Information	PE/Cyanine7 is designed to be excited by the Blue (488 nm), Green (532 nm) and yellow-green (561 nm) lasers and detected using an optical filter centered near 775 nm (e.g., a 780/60 nm bandpass filter).
Storage Buffer	Phosphate buffered solution, pH 7.2, containing 0.09% sodium azide and 1% BSA.

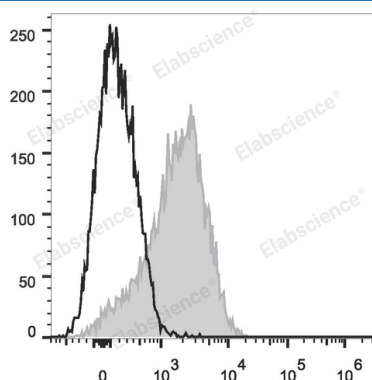
Applications

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.

Data



Human peripheral blood lymphocytes are stained with PE/Cyanine7 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 12 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

For Research Use Only

Gene ID

3676

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.