Elab Fluor® 647 Anti-Human CD49d Antibody[BU49]

Catalog Number: E-AB-F1040M

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

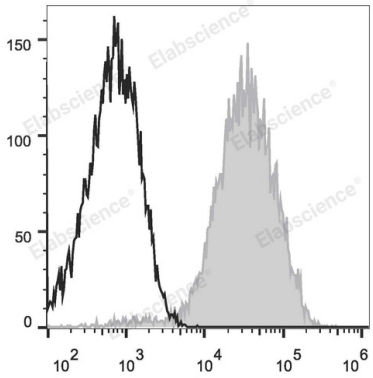
Description

Reactivity	Human
Host	Mouse
Isotype	Mouse IgG1, κ
Clone No.	BU49
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% 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 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 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
Gene ID	3676

For Research Use Only

Background

CD49d is a 150 kD α integrin chain known as α4 integrin or VLA-4 α chain. It forms a heterodimer with either integrin β1 (α4β1, VLA-4) or β7 (α4β7). 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. α4β7 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.