

## Elab Fluor® 700 Anti-Human CD49d Antibody[BU49]

Catalog Number: E-AB-F1040M1

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® 700 Mouse IgG1, κ Isotype Control[MOPC-21] [Product E-AB-F09792M1]
Conjugation	Elab Fluor® 700
Conjugation Information	Elab Fluor® 700 is designed to be excited by the Red laser (627-640 nm) and detected using an optical filter centered near 719 nm (e.g., a 725/40 nm bandpass filter).
Storage Buffer	Phosphate buffered solution, pH 7.2, containing 0.09% sodium azide and 1% BSA.

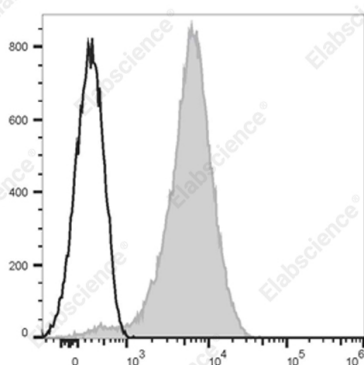
### Applications

### 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



Staining of normal human peripheral blood cells with Elab Fluor® 700 Anti-Human CD49d Antibody[BU49] (filled gray histogram) or Elab Fluor® 700 Mouse IgG1, κ Isotype Control (empty black histogram). Cells in the lymphocytes gate were used for analysis.

### 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  $\alpha$  integrin chain known as  $\alpha 4$  integrin or VLA-4  $\alpha$  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.