# **Elabscience**®

# Elab Fluor<sup>®</sup> 647 Anti-Human CD49d Antibody[BU49]

Catalog No.E-AB-F1040MStorageStore at 2~8°C, Avoid freeze / thaw cycles

Reactivity Applications

Human FCM

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

# **Antigen Information**

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

### **Product Details**

Form	Liquid
Size	20Tests/100Tests/100Tests×2
Clone No.	BU49
Host	Mouse
Isotype	Mouse IgG1, ĸ
Reactivity	Human
Application	FCM
Isotype Control	Elab Fluor <sup>®</sup> 647 Mouse IgG1, κ Isotype Control[MOPC-21] [Product E-AB-F09792M]
Storage Buffer	Phosphate buffered solution, pH 7.2, containing 0.09% stabilizer and 1% protein protectant.
Shipping	Biological ice pack at 4 °C
Stability & Storage	Keep as concentrated solution.
	Store at 2~8°C and protected from prolonged exposure to light.Do not freeze.
	This product is guaranteed up to one year from purchase.

#### **For Research Use Only**

# **Elabscience**®

# Fluorophore

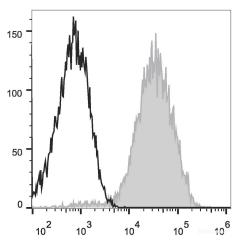
#### **Conjugation:** Elab Fluor<sup>®</sup> 647

Elab Fluor<sup>®</sup> 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).

# **Recommended usage**

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

# **Product data**



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

### **Related Information**

- 1. Sample Preparation for Flow Cytometry <u>https://www.elabscience.com/List-detail-5594.html</u>
- 2. Staining Cell Surface Targets for Flow Cytometry https://www.elabscience.com/List-detail-5568.html
- 3. Flow Cytometry Troubleshooting Tips https://www.elabscience.com/List-detail-5593.html
- 4. How to select the appropriate detection channel through the spectrogram? <u>https://www.elabscience.com/List-detail-459742.html</u>