

Tel:240-252-7368(USA) Fax: 240-252-7376(USA) techsupport@elabscience.com Website: www.elabscience.com

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

**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,  $\kappa$ 

**Reactivity** Human **Application** FCM

Isotype ControlElab Fluor® 647 Mouse IgG1, κ Isotype Control[MOPC-21] [Product E-AB-F09792M]Storage BufferPhosphate 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  $2\sim8^{\circ}\text{C}$  and protected from prolonged exposure to light.Do not freeze.

This product is guaranteed up to one year from purchase.



Tel:240-252-7368(USA) Fax: 240-252-7376(USA) techsupport@elabscience.com Website: www.elabscience.com

## **Fluorophore**

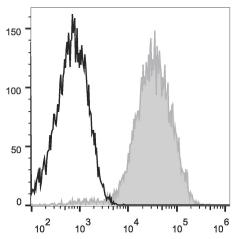
**Conjugation:** Elab Fluor<sup>®</sup> 647

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