

Elab Fluor® 488 Anti-Human CD49d Antibody[9F10]

Catalog No.	E-AB-F1144L	Reactivity	Human
Storage	Store at 2~8°C, Avoid freeze / thaw cycles	Applications	FCM

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

Antigen Information

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

Product Details

Form	Liquid
Size	20Tests/100Tests/100Tests×2
Clone No.	9F10
Host	Mouse
Isotype	Mouse IgG1, κ
Reactivity	Human
Application	FCM
Isotype Control	Elab Fluor® 488 Mouse IgG1, κ Isotype Control[MOPC-21] [Product E-AB-F09792L]
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

Fluorophore

Conjugation: Elab Fluor® 488

Elab Fluor® 488 is designed to be excited by the Blue laser (488 nm) and detected using an optical filter centered near 520 nm (e.g., a 525/40 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 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.

Related Information

1. Sample Preparation for Flow Cytometry <https://www.elabscience.com/List-detail-5594.html>
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? <https://www.elabscience.com/List-detail-459742.html>