

## PE/Cyanine5 Anti-Human CD49d Antibody[9F10]

Catalog Number: E-AB-F1144G

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

### Description

Reactivity	Human
Host	Mouse
Isotype	Mouse IgG1, $\kappa$
Clone No.	9F10
Isotype Control	PE/Cyanine5 Mouse IgG1, $\kappa$ Isotype Control[MOPC-21] [Product E-AB-F09792G]
Conjugation	PE/Cyanine 5
Conjugation Information	PE/Cyanine5 is designed to be excited by the Blue (488 nm), Green (532 nm) and yellow-green (561 nm) lasers and detected using an optical filter centered near 670 nm (e.g., a 690/50 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  $\mu$ 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.

### 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

#### 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.

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