# **Elabscience**®

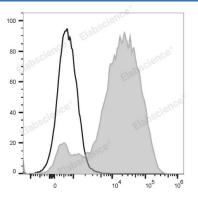
### PE/Cyanine7 Anti-Human CD49d Antibody[HP1/2]

#### Catalog Number: E-AB-F1359H

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

Description	
Reactivity	Human
Host	Mouse
lsotype	Mouse IgG2a, κ
Clone No.	HP1/2
Isotype Control	PE/Cyanine7 Mouse IgG2a, κ Isotype Control[C1.18.4] [Product E-AB-F09802H]
Conjugation	PE/Cyanine 7
Conjugation Information	PE/Cyanine7 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 775 nm (e.g., a 780/60 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



Human peripheral blood lymphocytes are stained with PE/Cyanine7 Anti-Human CD49d Recombinant Antibody (filled gray histogram) or PE/Cyanine7 Mouse IgG2a, ĸ Isotype Control (empty black histogram).

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	lce bag
Antigen Information	
Alternate Names	ITGA4Integrin $\alpha$ 4 chain $\alpha$ 4 integrin;VLA-4 $\alpha$ chain
Uniprot ID	P13612
Gene ID	3676

### For Research Use Only

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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.