

## 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

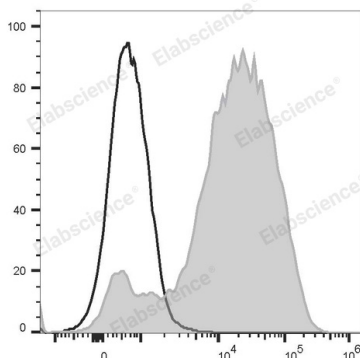
<b>Reactivity</b>	Human
<b>Host</b>	Mouse
<b>Isotype</b>	Mouse IgG2a, $\kappa$
<b>Clone No.</b>	HP1/2
<b>Isotype Control</b>	PE/Cyanine7 Mouse IgG2a, $\kappa$ Isotype Control[C1.18.4] [Product E-AB-F09802H]
<b>Conjugation</b>	PE/Cyanine 7
<b>Conjugation Information</b>	PE/Cyanine7 is designed to be excited 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).
<b>Storage Buffer</b>	Phosphate buffered solution, pH 7.2, containing 0.09% stabilizer.

### Applications

### Recommended usage

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



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

### Preparation & Storage

<b>Storage</b>	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.
<b>Shipping</b>	Ice bag

### Antigen Information

<b>Alternate Names</b>	ITGA4Integrin $\alpha$ 4 chain $\alpha$ 4 integrin;VLA-4 $\alpha$ chain
<b>Uniprot ID</b>	P13612
<b>Gene ID</b>	3676

### For Research Use Only

## 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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