

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

**Catalog Number:** GFH1359D

**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 Mouse IgG2a, $\kappa$ Isotype Control[C1.18.4] [Product E-AB-F09802D]                                                                                                                          |
| <b>Conjugation</b>             | PE                                                                                                                                                                                                |
| <b>Conjugation Information</b> | PE 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 575 nm (e.g., a 585/42 nm bandpass filter). |
| <b>Storage Buffer</b>          | Phosphate buffered solution, pH 7.2, containing 0.09% sodium azide.                                                                                                                               |

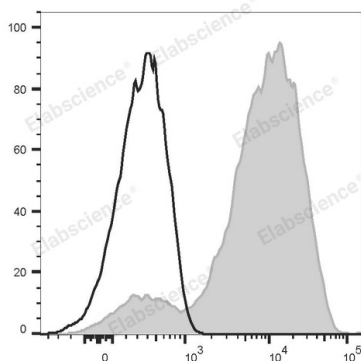
### Applications

**FCM**

### 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.

### Data



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

### Preparation & Storage

|                 |                                                                                                                                                           |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage</b>  | Keep as concentrated solution.<br>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.