

## FITC Anti-Human CD49d Antibody[BU49]

Catalog Number: E-AB-F1040C

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

### Description

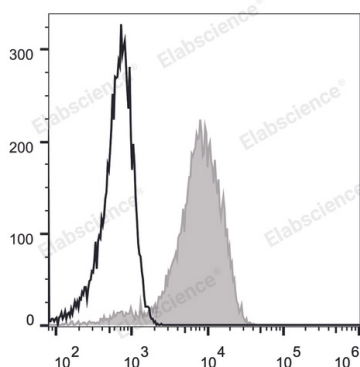
|                                |  |
|--------------------------------|--|
| <b>Reactivity</b>              | Human  |
| <b>Host</b>                    | Mouse  |
| <b>Isotype</b>                 | Mouse IgG1, κ  |
| <b>Clone No.</b>               | BU49   |
| <b>Isotype Control</b>         | FITC Mouse IgG1, κ Isotype Control[MOPC-21] [Product E-AB-F09792C]   |
| <b>Conjugation</b>             | FITC   |
| <b>Conjugation Information</b> | FITC is designed to be excited by the Blue laser (488 nm) and detected using an optical filter centered near 530 nm (e.g., a 525/40 nm bandpass filter). |
| <b>Storage Buffer</b>          | Phosphate buffered solution, pH 7.2, containing 0.09% sodium azide and 1% BSA.   |

### 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 μL of antibody per test (million cells in 100 μL staining volume or per 100 μL of whole blood).</b> 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 FITC Anti-Human CD49d Antibody (filled gray histogram). Unstained lymphocytes (empty black histogram) are used as control.

### 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> | CD49 antigen-like family member D;CD49d;ITGA4;Integrin alpha-4;Integrin alpha-IV; VLA-4 subunit alpha |
| <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.