

## Anti-mouse CD49d (Integrin alpha 4) SAFIRE Purified

Catalog Number :11522-25

RUO: For Research Use Only. Not for use in diagnostic procedures.

### Product Information

**Clone:** R1-2

**Format/Conjugate:** SAFIRE Purified

**Concentration:** 1 mg/mL

**Reactivity:** Mouse

**Laser:** Not Applicable

**Peak Emission:** Not Applicable

**Peak Excitation:** Not Applicable

**Filter:** Not Applicable

**Brightness (1=dim,5=brightest):** Not Applicable

**Isotype:** Rat IgG2b, kappa

**Formulation:** Phosphate-buffered aqueous solution, pH7.2.

**Storage:** Product should be kept at 2-8°C.

**Applications:** FC, FA

### Description

The R1-2 monoclonal antibody specifically reacts with mouse CD49d (integrin alpha 4), which forms the VLA-4 complex with CD29 (integrin beta 1). VLA-4 is expressed on thymocytes, monocytes, and a subset of peripheral lymphocytes. It is the receptor for fibronectin and CD106 (VCAM-1). CD49d also forms a receptor for mucosal vascular addressin (MAdCAM-1) with integrin beta 7.

### Preparation & Storage

The product should be stored undiluted at 4°C. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography. The endotoxin level is determined by LAL test to be less than 0.01 EU/μg of the protein.

### Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. It is recommended that the reagent be titrated for optimal performance for each application.

### References

1. Baron, J. L., Reich, E. P., Visintin, I., Janeway Jr, C. A. (1994). The pathogenesis of adoptive murine autoimmune diabetes requires an interaction between alpha 4-integrins and vascular cell adhesion molecule-1. *Journal of Clinical Investigation*, 93(4), 1700.
2. Chisholm, P. L., Williams, C. A., Lobb, R. R. (1993). Monoclonal antibodies to the integrin  $\alpha$ -4 subunit inhibit the murine contact hypersensitivity response. *European journal of immunology*, 23(3), 682-688.
3. Holzmann, B., McIntyre, B. W., Weissman, I. L. (1989). Identification of a murine Peyer's patch—specific lymphocyte homing receptor as an integrin molecule with an  $\alpha$  chain homologous to human VLA-4 $\alpha$ . *Cell*, 56(1), 37-46.