



## *Anti-mouse Integrin Alpha 2 subunit/CD49b Antibody*

### ORDERING INFORMATION

**Catalog Number:** AF1740

**Lot Number:** JQQ01

**Size:** 100 µg

**Formulation:** 0.2 µm filtered solution in PBS with 5% trehalose

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** mouse Integrin α2 extracellular domain

**Immunogen:** NS0-derived rmlIntegrin α2 extracellular domain

**Ig Type:** sheep IgG

**Applications:** Western blot  
Flow cytometry  
Immunocytochemistry  
Direct ELISA

### *Preparation*

Produced in sheep immunized with purified, NS0-derived, recombinant mouse Integrin Alpha 2 (rmlIntegrin α2; aa 27 - 1129) extracellular domain. Mouse Integrin α2 specific IgG was purified by mouse Integrin α2 affinity chromatography. The Integrin family proteins are heterodimeric transmembrane receptors comprised of an α and a β subunit. The Integrin α2 subunit is expressed in monocytes, platelets, B, T and NK cells. It forms a non-covalent heterodimer with the Integrin β1 subunit. Integrin α2/β1 binds collagen and laminin and activates intracellular signaling pathways.

### *Formulation*

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

### *Reconstitution*

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

### *Storage*

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### *Specificity*

This antibody has been selected for its ability to recognize mouse Integrin α2 in the applications listed below. In direct ELISAs and Western blots, this antibody shows approximately 10% cross-reactivity with rhlIntegrin αM and less than 1% cross-reactivity with rmlIntegrin α5 and rmlIntegrin αE.

### *Applications*

**Western blot** - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect mouse Integrin α2. The detection limit for rmlIntegrin α2 is approximately 5 ng/lane under non-reducing and reducing conditions.

**Flow cytometry** - This antibody can be used at 3 - 10 µg/mL/10<sup>6</sup> cells with an appropriate secondary antibody for indirect immunofluorescence staining of cells by flow cytometry.

**Immunocytochemistry** - This antibody will detect Integrin Alpha 2 in cells. The working dilution is 5 - 15 µg/mL.

**Direct ELISA** - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect mouse Integrin α2. The detection limit for rmlIntegrin α2 is approximately 0.2 ng/well.

**Optimal dilutions should be determined by each laboratory for each application.**