

Technical Data Sheet

Catalog Number:

Size:

Target Name: CD49b, Integrin alpha 2 chain, ITGA2

Regulatory Status: RUO

Product Details

Isotype: Mouse IgG2a IgM like

Antibody Type: Monoclonal

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide

Protein Concentration: 0.5 mg/mL

Storage&Handling: The antibody solution should be stored between 2°C and 8°C

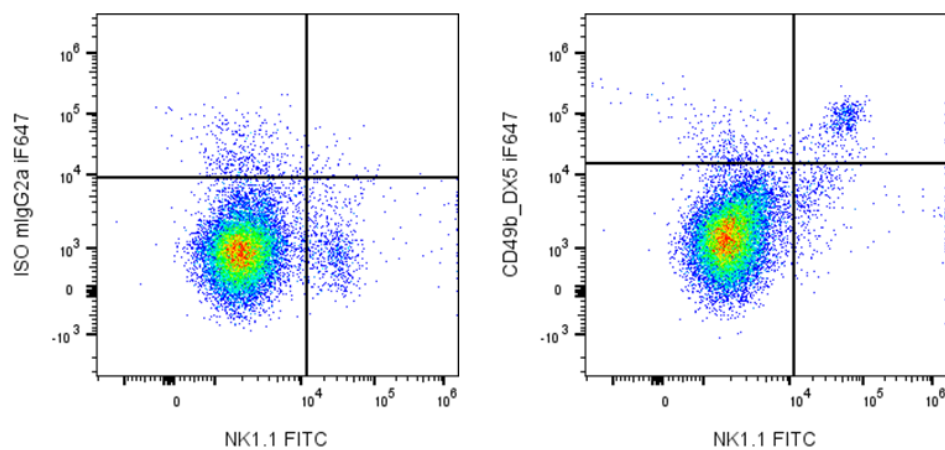
Recommended Usage: For flow cytometric staining, it is recommended to use less than 0.2 ug of this reagent per 0.5-1.0 million cells in a 100 µL volume. Optimal reagent performance should be determined by titration for each specific application.

Release Date: Dec-25

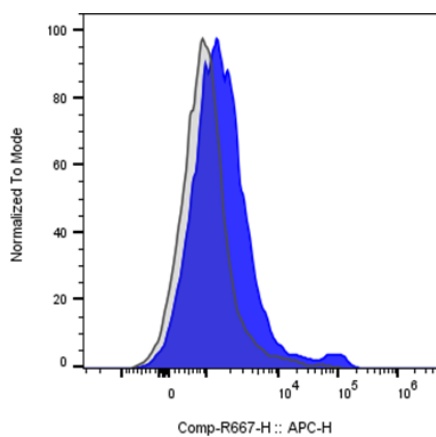
Background Information

CD49b is a 150 kD glycoprotein, also known as $\alpha 2$ integrin, VLA-2 α chain, Integrin $\alpha 2$ chain, and HM $\alpha 2$. It is a member of the integrin family, expressed on NK cells, a subset of splenic CD4⁺ T cells, NK-T cells, intestinal intraepithelial and lamina propria lymphocytes, epithelial cells, and platelets. By associating with CD29 (integrin $\beta 1$ subunit), CD49b forms the VLA-2 (integrin $\alpha 2\beta 1$) complex. It plays a critical role in both adhesion and lymphocyte activation. The primary ligands for CD49b are collagen, laminin, and fibronectin. The HM $\alpha 2$ antibody has been shown to be useful for partially blocking CD49b mediated interactions with collagen. Additionally, this antibody blocks staining of splenic NK cells by the monoclonal antibody DX5. This recombinant DX5-R antibody was produced by cloning its VH region into a mouse IgM-like backbone constructed from a mouse IgG2a-based framework.

Product Data



Mouse splenocytes were stained with FITC Anti-mouse NK1.1 clone PK136 and either iF647 Anti-Mouse CD49b clone DX5-R (right panel) or an isotype control (left panel).



Mouse splenocytes were stained with iF647 Anti-Mouse CD49b clone DX5-R (color-filled histogram) or an isotype control (gray histogram).