

## Technical Data Sheet

iF647 Anti-Mouse CD49b (pan-NK )

**Catalog Number:** 202602, 202603  
**Size:** 25 tests, 100 tests  
**Target Name:** CD49b, Integrin alpha 2 chain, ITGA2  
**Regulatory Status:** RUO

### Product Details

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**Clone:** DX5  
**Application:** FC  
**Reactivity:** Mouse  
**Format:** iF647  
**Isotype:** Rat IgM  
**Antibody Type:** Monoclonal  
**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA  
**Protein Concentration:** Supplied at a lot-specific concentration.  
**Storage&Handling:** The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.  
**Recommended Usage:** For flow cytometric staining, it is recommended to use 5 uL 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.  
**Excitation Laser:** Red Laser (633 nm)  
**Release Date:** Dec-25

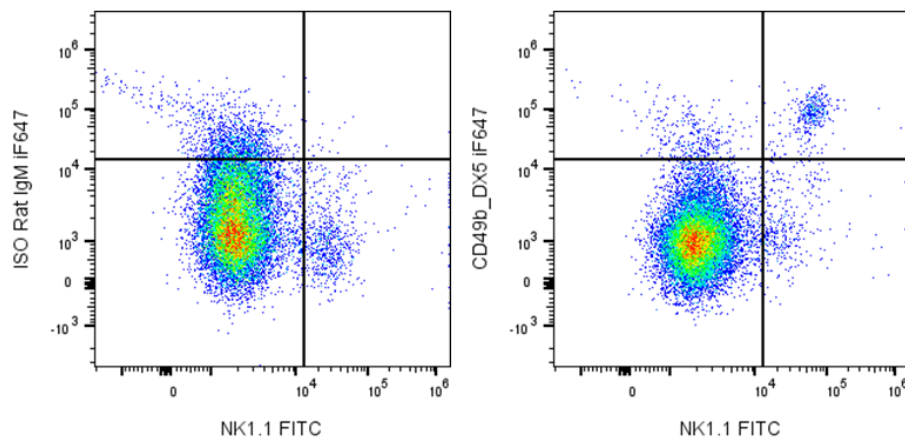
### Background Information

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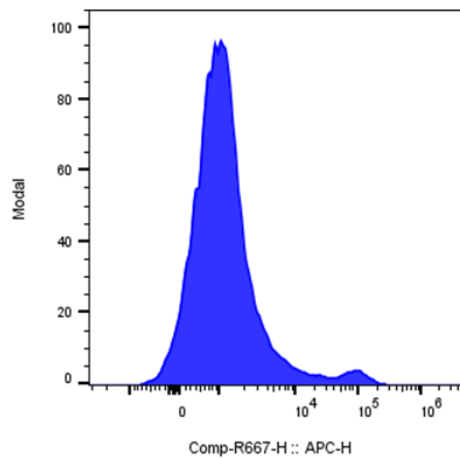
CD49b is a 150 kD glycoprotein, also known as  $\alpha 2$  integrin, VLA-2  $\alpha$  chain, Integrin  $\alpha 2$  chain, and HM $\alpha 2$ . It is a member of the integrin family, expressed on NK cells, a subset of splenic CD4<sup>+</sup> T cells, NK-T cells, intestinal intraepithelial and lamina propria 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.

### Product Data

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



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