

## Anti-Mouse CD49b Antibody, Clone DX5, Biotin



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## Antibodies

Rat monoclonal IgM antibody against mouse CD49b (integrin  $\alpha 2$ ), biotin-conjugated

Catalog #60020BT  
#60020BT.1

500  $\mu\text{g}$  0.5 mg/mL  
50  $\mu\text{g}$  0.5 mg/mL

FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.

## Product Description

The DX5 antibody reacts with murine CD49b (integrin  $\alpha 2$ ), an ~150 kDa type 1 transmembrane glycoprotein that associates non-covalently with CD29 (integrin  $\beta 1$ ) to form the heterodimeric CD49b/CD29 complex known as VLA-2, a receptor for extracellular matrix proteins such as collagen, E-cadherin, fibronectin and laminin. CD49b is highly expressed by platelets and is found on a majority of NK cells, on NKT cells, and on a small subset of CD8+ T cells; the latter population increases substantially following viral infection. CD49b is also expressed by several tissues, including intestine, kidney, mammary gland and lung. The DX5 antibody is particularly useful for identifying NK cells in mice lacking the NK1.1 antigen. Binding of the DX5 antibody has not been observed to affect the function of the VLA-2 integrin. DX5 binding is, however, blocked by the clone HM $\alpha 2$  antibody.

Target Antigen Name:	CD49b (Integrin $\alpha 2$ )
Alternative Names:	$\alpha 2$ integrin, Integrin $\alpha 2$ chain, VLA-2 $\alpha$ chain
Gene ID:	16398
Species Reactivity:	Mouse
Host Species:	Rat (LEW)
Clonality:	Monoclonal
Clone:	DX5
Isotype:	IgM, kappa
Immunogen:	IL-2-propagated NK1.1+ cells from C57BL/6 mice
Conjugate:	Biotin

## Applications

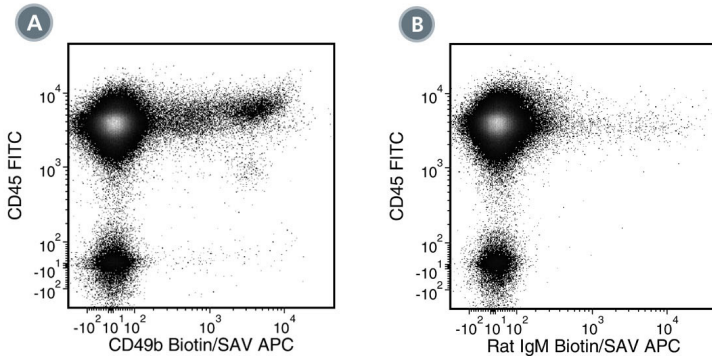
Verified:	CellSep, FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ Mouse NK Cell Enrichment Kit (Catalog #19755).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; WB: Western blotting

## Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact <a href="mailto:techsupport@stemcell.com">techsupport@stemcell.com</a> .
Directions for Use:	For flow cytometry the suggested use of this antibody is $\leq 0.25 \mu\text{g}$ per $1 \times 10^6$ cells in 100 $\mu\text{L}$ volume. It is recommended that the antibody be titrated for optimal performance for each application.

## Data



(A) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD49b Antibody, Clone DX5, Biotin followed by streptavidin (SAV) APC and Anti-Mouse CD45 Antibody, Clone 30-F11, FITC (Catalog #60030FI).

(B) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with a rat IgM, kappa biotin isotype control antibody followed by SAV APC and Anti-Mouse CD45 Antibody, Clone 30-F11, FITC.

## Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at [www.stemcell.com/antibodies](http://www.stemcell.com/antibodies) or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

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