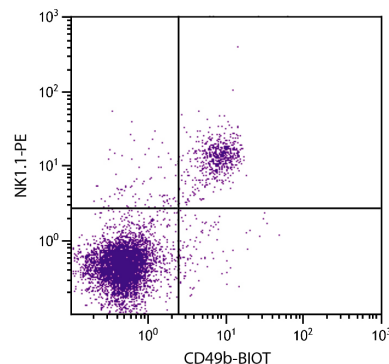




## Rat Anti-Mouse CD49b

Cat. No.	Format	Size
1806-01	Purified (UNLB)	0.5 mg
1806-02	Fluorescein (FITC)	0.5 mg
1806-08	Biotin (BIOT)	0.5 mg
1806-09	R-phycoerythrin (PE)	0.1 mg
1806-09L	R-phycoerythrin (PE)	0.2 mg
1806-11	Allophycocyanin (APC)	0.1 mg
1806-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
1806-19	Allophycocyanin-Cyanine 7 (APC/CY7)	0.1 mg
1806-30	Alexa Fluor® 488 (AF488)	0.1 mg
1806-31	Alexa Fluor® 647 (AF647)	0.1 mg



C57BL/6 mouse splenocytes were stained with Rat Anti-Mouse CD49b-BIOT (SB Cat. 1806-08) and Mouse Anti-Mouse NK1.1-PE (SB Cat. No. 1805-09) followed by Streptavidin-FITC (SB Cat. No. 7100-02).

## Overview

<b>Clone</b>	DX5
<b>Isotype</b>	Rat (Lewis) IgM <sub>k</sub>
<b>Immunogen</b>	NK cells isolated from C57BL/6 mice
<b>Specificity</b>	Mouse CD49b; Mr 160 kDa
<b>Alternate Name(s)</b>	$\alpha_2$ integrin, VLA-2 $\alpha$ , very late antigen-2, pan NK

## Description

The monoclonal antibody DX5 reacts with CD49b, also known as very late antigen-2 (VLA-2) and  $\alpha_2$  integrin. The antibody stains the majority of NK cells and a small subpopulation of T cells in all mouse strains tested (e.g., A/J, AKR, BALB/c, C3H/HeJ, C57BL/6, C57BL/10, C57BR, C58, CBA/Ca, CBA/J, DBA/1, DBA/2, SJL, SWR). Three-color flow cytometry analysis has revealed that most cells that express NK-1.1 (NKR-P1C) also express CD49b. However, small subsets of DX5<sup>+</sup>NK-1.1<sup>-</sup> and DX5<sup>-</sup>NK-1.1<sup>+</sup> cells can be found, especially among the CD3<sup>+</sup> population of T lymphocytes. NK cells cultured in the presence of IL-2 progressively lose reactivity with DX5 as a consequence of cellular proliferation. Therefore, DX5 can be used to define functionally distinct subsets of murine NK cells. The monoclonal antibody DX5 has not been demonstrated to have activating or blocking activity.

## Applications

FC – Quality tested <sup>1,4-8</sup>  
 IHC-PS – Reported in literature <sup>2</sup>  
 IHC-FS – Reported in literature <sup>3</sup>

## Working Dilutions

<b>Flow Cytometry</b>	FITC, BIOT, and AF488 conjugates	$\leq 1 \mu\text{g}/10^6$ cells
	PE, APC, APC/CY7, and AF647 conjugates	$\leq 0.2 \mu\text{g}/10^6$ cells
For flow cytometry, the suggested use of these reagents is in a final volume of 100 $\mu\text{L}$		

**Other Applications** Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.

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## Handling and Storage

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- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The allophycocyanin (APC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of PBS. **Aliquot and store at or below -20°C.**
- The allophycocyanin-Cyanine 7 (APC/CY7) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Alexa Fluor<sup>®</sup> 488 (AF488) and Alexa Fluor<sup>®</sup> 647 (AF647) conjugates are supplied as 0.1 mg in 0.2 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

## Warning

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Some reagents contain sodium azide. Please refer to product specific SDS.

## References

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