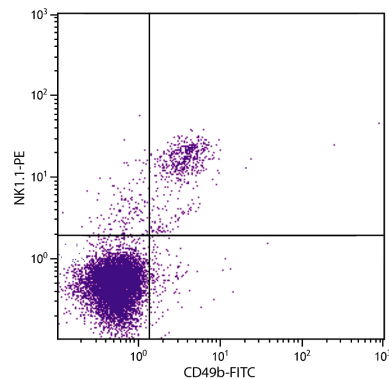




## Mouse Anti-Mouse NK1.1

Cat. No.	Format	Size
1805-01	Purified (UNLB)	0.5 mg
1805-02	Fluorescein (FITC)	0.5 mg
1805-08	Biotin (BIOT)	0.5 mg
1805-09	R-phycoerythrin (PE)	0.1 mg
1805-09L	R-phycoerythrin (PE)	0.2 mg
1805-11	Allophycocyanin (APC)	0.1 mg
1805-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
1805-17	R-phycoerythrin-Cyanine 7 (PE/CY7)	0.1 mg
1805-26	Pacific Blue™ (PACBLU)	0.1 mg
1805-27	Alexa Fluor® 700 (AF700)	0.1 mg
1805-30	Alexa Fluor® 488 (AF488)	0.1 mg
1805-31	Alexa Fluor® 647 (AF647)	0.1 mg



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

### Overview

<b>Clone</b>	PK136
<b>Isotype</b>	Mouse (C3H x BALB/c) IgG <sub>2a</sub> K
<b>Immunogen</b>	CE mouse spleen enriched for NK-1 <sup>+</sup> cells and bone marrow cells
<b>Specificity</b>	Mouse NK1.1; Mr 39 kDa
<b>Alternate Name(s)</b>	Ly-55, CD161b/CD161c

### Description

NK1.1, a member of the NKR-P1 family of cell surface receptors, is a type II integral membrane glycoprotein with a C-type lectin domain. It is expressed as a disulfide-linked homodimer on all NK cells as well as subsets of thymocytes and peripheral T lymphocytes in selected strains of mice (e.g., C57BL/6, NZB, and CE). NK1.1 mediates cellular activation and differentiation, and is thought to have a particular role in generating Th2 cells. This product does not react with NK cells of BALB/c mice.

### Applications

FC – Quality tested <sup>1,3-5,8,9</sup>  
 IHC – Reported in literature <sup>8</sup>  
 IP – Reported in literature <sup>3,4</sup>  
 Depletion – Reported in literature <sup>2,7</sup>  
 CMCD – Reported in literature <sup>5</sup>  
 Block – Reported in literature <sup>4</sup>  
 Activ – Reported in literature <sup>6</sup>

### Working Dilutions

<b>Flow Cytometry</b>	FITC, BIOT, PACBLU, AF488, and AF700 conjugates	≤ 1 μg/10 <sup>6</sup> cells
	PE and APC conjugates	≤ 0.5 μg/10 <sup>6</sup> cells
	PE/CY7 and AF647 conjugates	≤ 0.3 μg/10 <sup>6</sup> cells
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL	

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

**For Research Use Only. Not for Diagnostic or Therapeutic Use.**

## Handling and Storage

---

- 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 R-phycoerythrin-Cyanine 7 (PE/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 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 Alexa Fluor<sup>®</sup> 488 (AF488), Alexa Fluor<sup>®</sup> 647 (AF647), Alexa Fluor<sup>®</sup> 700 (AF700), and Pacific Blue™ (PACBLU) 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

---

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

## References

---

1. Koo GC, Peppard JR. Establishment of monoclonal anti-NK-1.1 antibody. *Hybridoma*. 1984;3:301-3. (Immunogen, FC)
2. Koo GC, Dumont FJ, Tutt M, Hackett J Jr, Kumar V. The NK-1.1(-) mouse: a model to study differentiation of murine NK cells. *J Immunol*. 1986;137:3742-7. (Depletion)
3. Sentman CL, Hackett J Jr, Moore TA, Tutt MM, Bennett M, Kumar V. Pan natural killer cell monoclonal antibodies and their relationship to the NK1.1 antigen. *Hybridoma*. 1989;8:605-14. (FC, IP)
4. Kung SK, Su R, Shannon J, Miller RG. The NKR-P1B gene product is an inhibitory receptor on SJL/J NK cells. *J Immunol*. 1999;162:5876-87. (FC, IP, Block)
5. Karlhofer FM, Yokoyama WM. Stimulation of murine natural killer (NK) cells by a monoclonal antibody specific for the NK1.1 antigen. IL-2-activated NK cells possess additional specific stimulation pathways. *J Immunol*. 1991;146:3662-73. (FC, CMCD)
6. Reichlin A, Yokoyama WM. Natural killer cell proliferation induced by anti-NK1.1 and IL-2. *Immunol Cell Biol*. 1998;76:143-52. (Activ)
7. Sharma N, He Q, Sharma RP. Amelioration of fumonisin B<sub>1</sub> hepatotoxicity in mice by depletion of T cells with anti-Thy-1.2. *Toxicology*. 2006;223:191-201. (Depletion)
8. Al-Falahi Y, Sand KL, Knudsen E, Damaj BB, Rolin J, Maghazachi AA. Splenic natural killer cell activity in two models of experimental neurodegenerative diseases. *J Cell Mol Med*. 2009;13:2693-703. (FC, IHC)
9. Freitas CS, Dalmau SR, Abdelhay E. Differential expression of notch signaling-related transcripts accompanies pro-thymocyte proliferation and phenotype transition induced by epidermal growth factor plus insulin in fetal thymus organ cultures. *Mem Inst Oswaldo Cruz*. 2004;99:381-88. (FC)

Cy<sup>®</sup> is a registered trademark of GE Healthcare.

Alexa Fluor<sup>®</sup> 488, 647, 700 and Pacific Blue™ are provided under an agreement between Molecular Probes, Inc. (a wholly owned subsidiary of Invitrogen Corporation), and Southern Biotechnology Associates, Inc., and the manufacture, use, sale or import of this product may be subject to one or more U.S. patents, pending applications, and corresponding non-U.S. equivalents, owned by Molecular Probes, Inc. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes. Commercial Purposes means any activity by a party for consideration and may include, but is not limited to: (1) use of the product or its components in manufacturing; (2) use of the product or its components to provide a service, information, or data; (3) use of the product or its components for therapeutic, diagnostic or prophylactic purposes; or (4) resale of the product or its components, whether or not such product or its components are resold for use in research. For information on purchasing a license to this product for any other use, contact Molecular Probes, Inc., Business Development, 29851 Willow Creek Road, Eugene, OR 97402, USA, Tel: (541) 465-8300. Fax: (541) 335-0504.