## **Product Data Sheet**

#### APC/Cy7 anti-mouse NK-1.1

**Catalog # / Size:** 1143620 / 100 μg

1143615 / 25 μg

Clone: PK136

**Isotype:** Mouse IgG2a, κ

Immunogen: NK-1+ cells from mouse spleen and

bone marrow

Reactivity: Mouse

**Preparation:** The antibody was purified by affinity

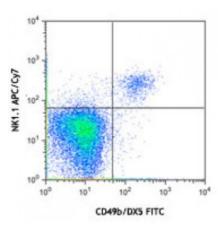
chromatography, and conjugated with APC/Cy7 under optimal conditions. The solution is free of unconjugated APC/Cy7

and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2



C57BL/6 mouse splenocytes were stained with CD49b/DX5 FITC and NK1.1 (clone PK136) APC/Cy7 (top) or mouse IgG2a APC/Cy7 isotype control (bottom).

### **Applications:**

**Applications:** Flow Cytometry

Recommended

**Usage:** 

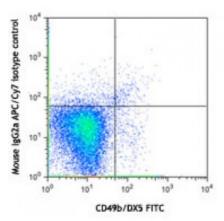
Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤1.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes:

Additional reported applications (for the

relevant formats) include:

immunoprecipitation  $^{1,2}$ , complement-dependent cytotoxicity  $^{3}$ ,  $in\ vivo$  depletion  $^{4,5,9,10}$ , mediation of  $in\ vitro$  redirected lysis  $^{6}$ , blocking of NK cell function  $^{7}$ , induction of proliferation  $^{8}$ , immunohistochemical staining of frozen sections  $^{11}$ , and immunofluorescence microscopy  $^{11}$ . The LEAF  $^{\text{TM}}$  purified antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2  $\mu$ m filtered) is recommended for functional assays (Cat. No. 108712).



Application References:

- 1. Carlyle JR, et al. 1999. J. Immunol. 162:5917. (IP)
- 2. Sentman CL, et al. 1989. Hybridoma 8:605. (IP)
- 3. Koo GC, et al. 1984. Hybridoma 3:301. (Cyt)
- 4. Sentman CL, et al. 1989. J. Immunol. 142:1847. (Deplete)
- 5. Koo GC, et al. 1986. J. Immunol. 137:3742. (Deplete)
- 6. Karlhofer FM, et al. 1991. J. Immunol. 146:3662.
- 7. Kung SK, et al. 1999. J. Immunol. 162:5876. (Block)

- 8. Reichlin A, et al. 1998. Immunol. Cell Biol. 76:143.
- 9. Drobyski W, et al. 1996. Blood 87:5355. (Deplete)
- 10. Andoniou CE, et al. 2005. Nat. Immunol. 6:1011. (Deplete)
- 11. Kanwar JR, et al. 2001. J. Natl. Cancer Inst. 93:1541. (IHC, IF)
- 12. Kroemer A, et al. 2008. J. Immunol. 180:7818. PubMed
- 13. Kim JY, et al. 2009. Exp Mol Med. 30:288. PubMed
- 14. Bankoti J, et al. 2010. Toxicol. Sci. 115:422. (FC) PubMed
- 15. Lee H, et al. 2014. Invest Ophthalmol Vis Sci. 55:2885. PubMed

#### **Description:**

NK-1.1 surface antigen, also known as CD161b/CD161c and Ly-55, is encoded by the NKR-P1B/NKR-P1C gene. It is expressed on NK cells and NK-T cells in some mouse strains, including C57BL/6, FVB/N, and NZB, but not AKR, BALB/c, CBA/J, C3H, DBA/1, DBA/2, NOD, SJL, and 129. Expression of NKR-P1C antigen has been correlated with lysis of tumor cells *in vitro* and rejection of bone marrow allografts *in vivo*. NK-1.1 has also been shown to play a role in NK cell activation, IFN- $\gamma$  production, and cytotoxic granule release. NK-1.1 and DX5 are commonly used as mouse NK cell markers.

# Antigen References:

- 1. Lanier LL. 1997. Immunity 6:371.
- 2. Yokoyama WM, et al. 1993. Ann. Rev. Immunol. 11:613.
- 3. Koo GC, et al. 1986. J. Immunol. 137:3742.
- 4. Giorda R, et al. 1991. J. Immunol. <