SONY

# Product Data Sheet

## APC anti-mouse NK-1.1

**Catalog # / Size:** 1143550 / 100 µg
1143545 / 25 µg

**Clone:** PK136

**Isotype:** Mouse IgG2a, κ

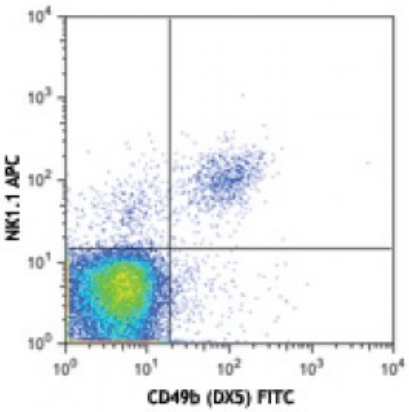
**Immunogen:** NK-1+ cells from mouse spleen and bone marrow

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.2

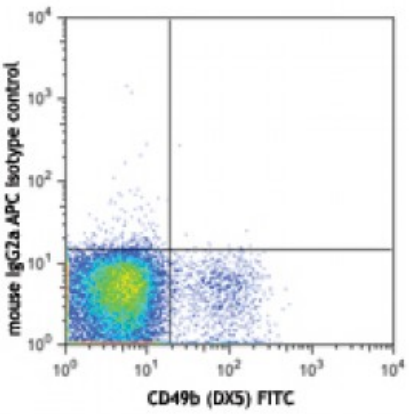



C57BL/6 mouse splenocytes were stained with CD49b (DX5) FITC and NK1.1 (clone PK136) APC (top) or mouse IgG2a APC isotype control (bottom).

## 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 cytotoxicity3, *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™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm 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-γ 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.<*