## **Product Data Sheet**

## FITC anti-mouse NK-1.1

Catalog # / Size: 1143525 / 50 µg

1143530 / 500 μg

Clone:

Isotype: Mouse IgG2a, κ

NK-1+ cells from mouse spleen and Immunogen:

bone marrow

Reactivity: Mouse

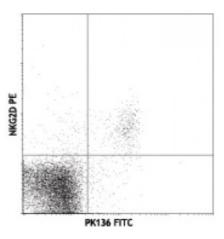
**Preparation:** The antibody was purified by affinity

chromatography, and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

**Concentration:** 0.5



C57BL/6 mouse splenocytes were stained with NK1.1 (clone PK136) FITC and NKG2D PE.

## **Applications:**

Immunofluorescence **Applications:** 

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  $\leq 0.25$  microg per  $10^6$  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<sup>1,2</sup>, complement-dependent cytotoxicity3, *in vivo* depletion<sup>4,5,9,10</sup>, mediation of *in vitro* redirected lysis<sup>6</sup>, blocking of NK cell function<sup>7</sup>, induction of proliferation<sup>8</sup>, immunohistochemical staining of frozen sections  $^{11}$ , and immunofluorescence microscopy  $^{11}$ . The LEAF  $^{\text{m}}$  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- $\gamma$  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. <