

Brilliant Violet 510™ anti-mouse NK-1.1

Catalog # / Size: 1143685 / 125 µl
1143690 / 500 µl

Clone: PK136

Isotype: Mouse IgG2a, κ

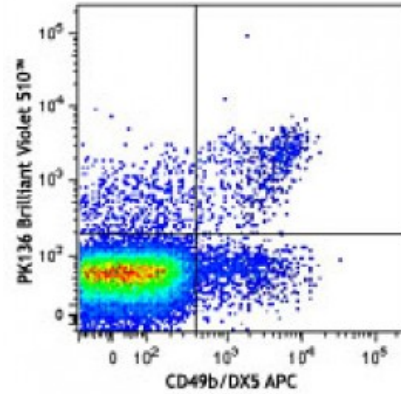
Immunogen: NK-1+ cells from mouse spleen and bone marrow

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 510™ and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Concentration: Lot-specific

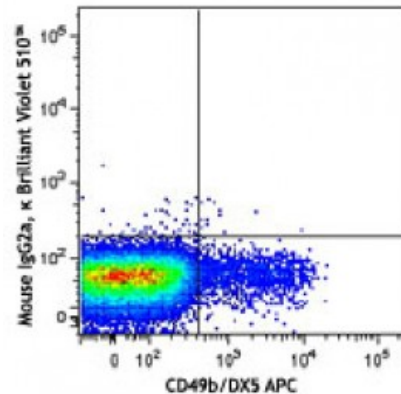


C57BL/6 mouse splenocytes were stained with CD49b/DX5 APC and NK1.1 (clone PK136) Brilliant Violet 510™ (top) or mouse IgG2a, κ Brilliant Violet 510™ isotype control (bottom).

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 ≤5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 510™ is a trademark of Sirigen Group Ltd.

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purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

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 lysis⁶, blocking of NK cell function⁷, induction of proliferation⁸, immunohistochemical staining of frozen sections¹¹, and immunofluorescence microscopy¹¹. 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.* <