

Alexa Fluor® 647 anti-mouse NK-1.1 Antibody

Catalog# / Size	108719 / 25 µg 108720 / 100 µg
Clone	PK136
Regulatory Status	RUO
Other Names	NKR-P1C, NKR-P1B, Ly-55, CD161, CD161b, CD161c
Isotype	Mouse IgG2a, κ
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 <i>in vitro</i> and rejection of bone marrow allografts <i>in vivo</i> . 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.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	NK-1 ⁺ cells from mouse spleen and bone marrow
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
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 ≤0.06 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
Excitation Laser	Red Laser (633 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation ^{1,2} , complement-dependent cytotoxicity ³ , <i>in vivo</i> depletion ^{4,5,9,10} , mediation of <i>in vitro</i> redirected lysis ⁶ , blocking of NK cell function ⁷ , induction of proliferation ⁸ , immunohistochemical staining of frozen sections ¹¹ , immunofluorescence microscopy ¹¹ , and spatial biology (IBEX) ^{16,17} . 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, <i>et al.</i> 1999. <i>J. Immunol.</i> 162:5917. (IP) 2. Sentman CL, <i>et al.</i> 1989. <i>Hybridoma</i> 8:605. (IP) 3. Koo GC, <i>et al.</i> 1984. <i>Hybridoma</i> 3:301. (Cyt) 4. Sentman CL, <i>et al.</i> 1989. <i>J. Immunol.</i> 142:1847. (Deplete)
(PubMed link indicates BioLegend citation)	

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Product Citations

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RRID

AB_493186 (BioLegend Cat. No. 108719)
 AB_2132713 (BioLegend Cat. No. 108720)

Antigen Details

Structure	NKR-P1 gene family
Distribution	NK and NK-T cells in the NK1.1 mouse strains (C57BL, FVB/N, NZB)
Function	NK cell activation, IFN- γ production, cytotoxic granule release
Cell Type	NK cells, NKT cells
Biology Area	Immunology, Innate Immunity
Antigen References	<ol style="list-style-type: none"> 1. Lanier LL. 1997. <i>Immunity</i> 6:371. 2. Yokoyama WM, <i>et al.</i> 1993. <i>Ann. Rev. Immunol.</i> 11:613. 3. Koo GC, <i>et al.</i> 1986. <i>J. Immunol.</i> 137:3742. 4. Giorda R, <i>et al.</i> 1991. <i>J. Immunol.</i> 147:1701.
Gene ID	17059

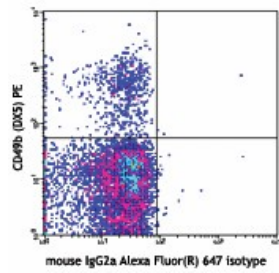
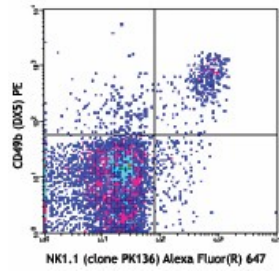
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-mouse NK-1.1, Biotin anti-mouse NK-1.1, FITC anti-mouse NK-1.1, PE anti-mouse NK-1.1, Purified anti-mouse NK-1.1, PE/Cyanine7 anti-mouse NK-1.1, PE/Cyanine5 anti-mouse NK-1.1, Alexa Fluor® 488 anti-mouse NK-1.1, Alexa Fluor® 647 anti-mouse NK-1.1, Pacific Blue™ anti-mouse NK-1.1, Brilliant Violet 711™ anti-mouse NK-1.1, APC/Cyanine7 anti-mouse NK-1.1, PerCP anti-mouse NK-1.1, PerCP/Cyanine5.5 anti-mouse NK-1.1, Alexa Fluor® 700 anti-mouse NK-1.1, Brilliant Violet 421™ anti-mouse NK-1.1, Brilliant Violet 570™ anti-mouse NK-1.1, Brilliant Violet 650™ anti-mouse NK-1.1, Brilliant Violet 510™ anti-mouse NK-1.1, Brilliant Violet 605™ anti-mouse NK-1.1, Purified anti-mouse NK-1.1 (Maxpar® Ready), PE/Dazzle™ 594 anti-mouse NK-1.1, Brilliant Violet 785™ anti-mouse NK-1.1, APC/Fire™ 750 anti-mouse NK-1.1, TotalSeq™-A0118 anti-mouse NK-1.1, Ultra-LEAF™ Purified anti-mouse NK-1.1, TotalSeq™-B0118 anti-mouse NK-1.1, TotalSeq™-C0118 anti-mouse NK-1.1, PE/Fire™ 810 anti-mouse NK-1.1

Product Data



C57BL/6 mouse splenocytes were stained with CD49b (DX5) PE and NK1.1 (clone PK136) Alexa Fluor® 647 (top) or mouse IgG2a Alexa Fluor® 647 isotype control (bottom).

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