

Brilliant Violet 605™ anti-mouse NK-1.1 Antibody

Catalog# / Size	108739 / 125 µL 108753 / 50 µg 108740 / 500 µL
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 and BSA (origin USA).
Preparation	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605™ under optimal conditions.
Concentration	µg size: 0.2 mg/mL µL sizes: lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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 using the µL sizes, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. For flow cytometric staining using the µg size, the suggested use of this reagent is ≤0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application. Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 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 605™ is a trademark of Sirigen Group Ltd.

[Learn more about Brilliant Violet™.](#)

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Excitation Laser Violet Laser (405 nm)

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, immunofluorescence microscopy¹¹, 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

(PubMed link indicates BioLegend citation)

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Product Citations

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RRID

AB_2562273 (BioLegend Cat. No. 108739)
AB_2686977 (BioLegend Cat. No. 108753)
AB_2562274 (BioLegend Cat. No. 108740)

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

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Gene ID

[17059](#)

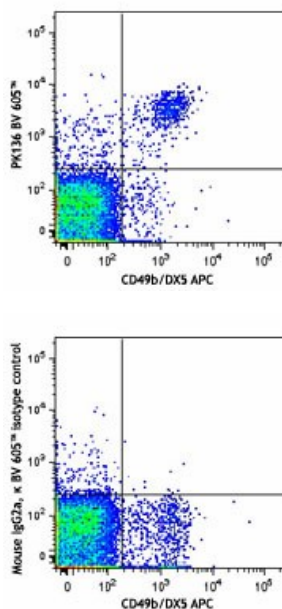
Related Protocols

[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 APC and NK1.1 (clone PK136) Brilliant Violet 605™ (top) or mouse IgG2a, κ Brilliant Violet 605™ isotype control (bottom).

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