

NK1.1 Monoclonal Antibody (PK136), Super Bright™ 780, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), Super Bright™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	PK136
Conjugate	Super Bright™ 780
Excitation/Emission Max	413/780 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4°C, store in dark, DO NOT FREEZE!
RRID	AB_2744923

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	2 Publications
Flow Cytometry (Flow)	0.5 µg/test	18 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

Description: The PK136 monoclonal antibody reacts with mouse NK1.1, an antigen expressed by natural killer cells and a subset of T cells in the NK1.1 mouse strains including C57BL and NZB. Several commonly used laboratory mouse strains such as BALB/c, SJL, AKR, CBA, C3H and A do not express the NK1.1 antigen. For detection of NK cells in these strains the monoclonal antibody DX5 14-5971 should be used. Simultaneous staining of C57BL/6 spleen cells with PK136 and DX5 reveals coexpression of both markers by a majority of cells as well as presence of small populations of DX5+PK136- and DX5-PK136+ cells.

Applications Reported: PK136 has been reported for use in flow cytometric analysis.

Applications Tested: The PK136 antibody has been tested by flow cytometric analysis of C57BL/6 mouse splenocytes and can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Super Bright 780 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 780 nm. We recommend using a 780/60 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

In some experiments, we have observed that compensation values for Super Bright 780-conjugated antibodies are higher in the violet 450/50 channel when using UltraComp eBeads microspheres (Product # 01-2222-42) as compared to single-color stained cells. In such circumstances, we would recommend setting compensation with cells. We have also observed this in some experiments using AbC Total Antibody Compensation beads (Product # A10497).

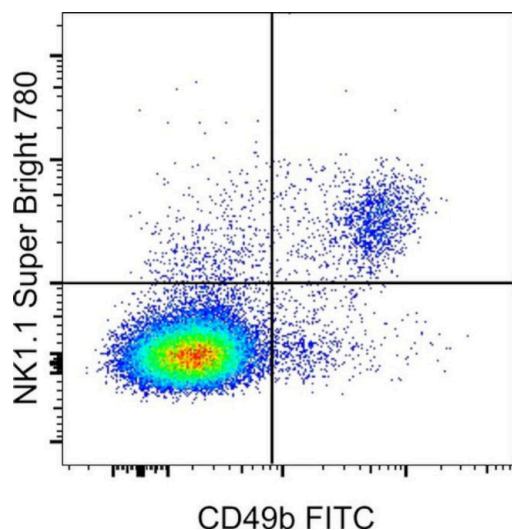
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 780 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For NK1.1 Monoclonal Antibody (PK136), Super Bright™ 780, eBioscience™



NK1.1 Antibody (78-5941-82) in Flow

C57BL/6 mouse splenocytes were stained with CD49b (Integrin alpha 2) Monoclonal Antibody, FITC (Product # 11-5971-82) and 0.25 μ g of NK1.1 Monoclonal Antibody, Super Bright 780 (right). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

21 References

Immunohistochemistry (2)

BMC medicine

A combination of genetically engineered oncolytic virus and melittin-CpG for cancer viro-chemo-immunotherapy.

"Published figure using NK1.1 monoclonal antibody (Product # 78-5941-82) in Immunohistochemistry"

Authors: Bahreyni A,Liu H,Mohamud Y,Xue YC,Fan YM,Zhang YL,Luo H

Year
2023

Journal of oncology

The Effect of *miR-520b* on Macrophage Polarization and T Cell Immunity by Targeting *PTEN* in Breast Cancer.

"Published figure using NK1.1 monoclonal antibody (Product # 78-5941-82) in Immunohistochemistry"

Authors: Zhu Q,Yuan J,He Y,Hu Y

Year
2022

Flow Cytometry (18)

Cell communication and signaling : CCS

Ten-eleven translocation-2-mediated macrophage activation promotes liver regeneration.

"Published figure using NK1.1 monoclonal antibody (Product # 78-5941-82) in Flow Cytometry"

Authors: Chen Y,Meng L,Xu N,Chen H,Wei X,Lu D,Wang S,Xu X

Year
2024

STAR protocols

Protocol for PPP1R15A-inhibited mouse model establishment with subcutaneous B16F1 tumor and single-cell analysis.

"Published figure using NK1.1 monoclonal antibody (Product # 78-5941-82) in Flow Cytometry"

Authors: Wang R,Wang M,Pei S,Zhang Y,Guo S,Guo W,Wu Z,Wang H,Li Y,Zhu Y,Meng LH,Lang J,Jin G,Xiao Y,Hu L, Kong X

Year
2023

[View more Flow references on thermofisher.com](#)

More applications with references on thermofisher.com

Misc (1)

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