

# 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
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)	-	1 Publication
Flow Cytometry (Flow)	0.5 µg/test	8 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 10<sup>5</sup> to 10<sup>8</sup> 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).

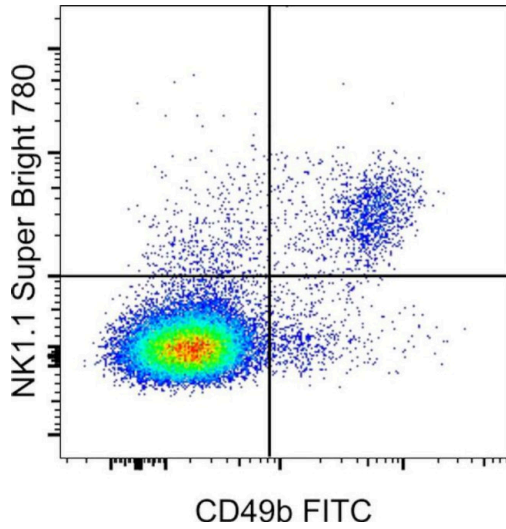
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ 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  $\mu$ 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)

## 10 References

### Immunohistochemistry (1)

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 (8)

JCI insight

#### NK cells require immune checkpoint receptor LILRB4/gp49B to control neurotropic Zika virus infections in mice.

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

Authors: Lee HN, Manangeeswaran M, Lewkowicz AP, Engel K, Chowdhury M, Garige M, Eckhaus MA, Sourbier C, Ireland DD, Verthelyi D

Year  
2022

Cancer cell international

#### Exosomal lncRNA SNHG10 derived from colorectal cancer cells suppresses natural killer cell cytotoxicity by upregulating INHBC.

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

Authors: Huang Y, Luo Y, Ou W, Wang Y, Dong D, Peng X, Luo Y

Year  
2021

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

### Miscellaneous PubMed (1)

eLife

#### Histone deacetylase 3 represses cholesterol efflux during CD4<sup>+</sup> T-cell activation.

"Published figure using NK1.1 monoclonal antibody (Product # 78-5941-82) in Protein Assays and Analysis"

Authors: Wilfahrt D, Philips RL, Lama J, Kizerwetter M, Shapiro MJ, McCue SA, Kennedy MM, Rajcula MJ, Zeng H, Shapiro VS

Year  
2021

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