

# NK1.1 Monoclonal Antibody (PK136), Super Bright™ 702, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), Super Bright™ 702, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	PK136
Conjugate	Super Bright™ 702
Excitation/Emission Max	413/702 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_2735072

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Flow Cytometry (Flow)	0.5 µg/test	16 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 (Cat. No. 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:** This PK136 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This PK136 antibody has been tested by flow cytometric analysis of mouse splenocytes. This 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 702 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 702 nm. We recommend using a 710/50 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.

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

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 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: 702 nm; Laser: Violet Laser

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

## Immunohistochemistry (1)

Journal of oncology	Year 2022
<b>The Effect of <i>miR-520b</i> on Macrophage Polarization and T Cell Immunity by Targeting <i>PTEN</i> in Breast Cancer.</b>	
"Published figure using NK1.1 monoclonal antibody (Product # 67-5941-82) in Immunohistochemistry"	
Authors: Zhu Q,Yuan J,He Y,Hu Y	

## Flow Cytometry (16)

Cell death & disease	Year 2022
<b>Valosin-containing protein (VCP/p97) inhibition reduces viral clearance and induces toxicity associated with muscular damage.</b>	
"Published figure using NK1.1 monoclonal antibody (Product # 67-5941-82) in Flow Cytometry"	
Authors: Del Rio Oliva M,Basler M	

Theranostics	Year 2022
<b>Glutamine is essential for overcoming the immunosuppressive microenvironment in malignant salivary gland tumors.</b>	
"67-5941-82 was used in Flow cytometry/Cell sorting to determine if attenuated host autophagy is sufficient to induce tumor rejection through reinforced adaptive immunity and whether dietary glutamine supplementation, mimicking attenuated host autophagy, is capable of promoting antitumor immunity."	
Authors: Cao S,Hung YW,Wang YC,Chung Y,Qi Y,Ouyang C,Zhong X,Hu W,Coblentz A,Maghami E,Sun Z,Lin HH,Ann DK	
	Species Mouse
	Dilution 1:100

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

## Miscellaneous PubMed (1)

eLife	Year 2021
<b>Histone deacetylase 3 represses cholesterol efflux during CD4<sup>+</sup> T-cell activation.</b>	
"Published figure using NK1.1 monoclonal antibody (Product # 67-5941-82) 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	

## More applications with references on thermofisher.com

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