

TECHNICAL DATA SHEET

CyFlow™ NK1.1 Low Endotoxin Anti-Ms; Clone PK136

REF BL131384

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	NK1.1
Alternative Names	CD161bc
Clone	PK136
Clonality	monoclonal
Format	Low Endotoxin
Host / Isotype	Mouse / IgG2a
Species Reactivity	Mouse
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	NK1-positive murine splenic and bone marrow cells

Specificity

The mouse monoclonal antibody PK136 recognizes NK1.1 (CD161bc) antigen (NK cell marker) expressed by some mouse strains (e.g. C57BL/6, NZB, CE, C58, Ma/My), whereas other strains (e.g.

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BALB/c, AKR, CBA, C3H) do not express this antigen. This antibody detects a conformational epitope on Nkrp1c and Nkrp1b gene products.

Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation
- Immunohistochemistry (frozen sections)
- Functional assays

Storage Buffer

The reagent is provided in azide-free phosphate buffered saline (PBS) solution, pH $\approx$ 7.4; 0.2 μ m filter sterilized. Endotoxin level is less than 0.01 EU/ μ g of the protein, as determined by the LAL test.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

NK1.1 (CD161bc and also known as NKRP1, Ly55c, or Ly59) is a cell surface antigen expressed on NK cells and NK-T cells of certain mouse strains, which is being used for identification or antibody-mediated depletion of these cells in the respective strains. This antigen participates in NK cell activation, including production of interferon gamma, and release of cytotoxic granules.

References

- Wang M, Ellison CA, Gartner JG, HayGlass KT: Natural killer cell depletion fails to influence initial CD4 T cell commitment in vivo in exogenous antigen-stimulated cytokine and antibody responses. J Immunol. 1998 Feb 1; 160(3):1098-105. < PMID: 9570522 >
- Carroll JL, Nielsen LL, Pruett SB, Mathis JM: The role of natural killer cells in adenovirus-mediated p53 gene therapy. Mol Cancer Ther. 2001 Nov; 1(1):49-60. < PMID: 12467238 >
- Símová J, Bubeník J, Bieblová J, Jandlová T: The role of NK1.1+ cells in the protection against MHC class I+ HPV16-associated tumours. Folia Biol (Praha). 2004; 50(6):200-2. < PMID: 15709715 >

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- Kulesza J, Hoser G, Wasilewska D, Kawiak J: NK cell depletion and recovery in SCID mice treated with anti-NK1.1 antibody. *Folia Histochem Cytobiol.* 2006; 44(2):93-6. < PMID: 16805133 >
- Takahashi S, Kawamura T, Kanda Y, Taniguchi T, Nishizawa T, Imai T, Hatakeyama K, Abo T: Activation of CD1d-independent NK1.1+ T cells in the large intestine by Lactobacilli. *Immunol Lett.* 2006 Jan 15; 102(1):74-8. < PMID: 16107279 >
- Carlyle JR, Mesci A, Ljutic B, Belanger S, Tai LH, Rousselle E, Troke AD, Proteau MF, Makrigiannis AP: Molecular and genetic basis for strain-dependent NK1.1 alloreactivity of mouse NK cells. *J Immunol.* 2006 Jun 15; 176(12):7511-24. < PMID: 16751398 >
- Fang M, Lanier LL, Sigal LJ: A role for NKG2D in NK cell-mediated resistance to poxvirus disease. *PLoS Pathog.* 2008 Feb 8; 4(2):e30. < PMID: 18266471 >
- Laffont S, Seillet C, Ortaldo J, Coudert JD, Guéry JC: Natural killer cells recruited into lymph nodes inhibit alloreactive T-cell activation through perforin-mediated killing of donor allogeneic dendritic cells. *Blood.* 2008 Aug 1; 112(3):661-71. < PMID: 18505782 >
- GeurtsvanKessel CH, Bergen IM, Muskens F, Boon L, Hoogsteden HC, Osterhaus AD, Rimmelzwaan GF, Lambrecht BN: Both conventional and interferon killer dendritic cells have antigen-presenting capacity during influenza virus infection. *PLoS One.* 2009 Sep 28; 4(9):e7187. < PMID: 19784375 >
- Joncker NT, Shifrin N, Delebecque F, Raulet DH: Mature natural killer cells reset their responsiveness when exposed to an altered MHC environment. *J Exp Med.* 2010 Sep 27; 207(10):2065-72. < PMID: 20819928 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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