

Datasheet: MCA1266XZ

BATCH NUMBER 156442

Description:	MOUSE ANTI MOUSE CD161 / NK1.1:Preservative Free		
Specificity:	CD161 / NK1.1		
Format:	Preservative Free		
Product Type:	Monoclonal Antibody		
Clone:	PK136		
Isotype:	IgG2a		
Quantity:	1 mg		

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry				5ug/ml - 10ug/ml
Immunohistology - Frozen			•	
Immunohistology - Paraffin			•	
ELISA			•	
Immunoprecipitation				
Western Blotting			•	
Cytotoxic Assays				1ug/ml - 10ug/ml. See reference 4
Functional Assays				

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species	Mouse
Species Cross Reactivity	Does not react with:Rat, Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A
Buffer Solution	Phosphate buffered saline

Preservative Stabilisers	None present				
Carrier Free	Yes				
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml				
Immunogen	Spleen and bone marrow cells from CE mice.				
External Database Links	UniProt: P27814 Related reagents P27812 Related reagents				
	Entrez Gene:				
	17059 Klrb1c Related reagents				
	80782 Klrb1b Related reagents				
Synonyms	Ly55b, Ly55c, Nkrp1b, Nkrp1c				
RRID	AB_322348				
Fusion Partners	Spleen cells from immunised (C3H x BALB/c) FI Hybrid were fused with cells of the Sp2/0 - Ag14 myeloma cell line.				
Specificity	Mouse anti Mouse CD161 / NK1.1 antibody, clone PK136 recognizes the mouse NK1.1 cell surface antigen, a cell surface glycoprotein encoded by members of the NKR-P1 gene family. The NK1.1 surface antigen is also known as CD161b/CD161c and Ly-55.				
	In the mouse the NKR-P1 family has three members, NKR-P1A, -B and -C, whilst in the human only one member has been identified. The human protein has received the designation CD161, and the mouse proteins have been referred to as CD161a, -b, -c etc.				
	Although previously thought to recognize only CD161c, recent data has shown that the PK136 antibody may also react with CD161b. CD161c expression itself is strain specific in mice, but recognition of CD161b by PK136 appears to be even more complex, as only some CD161b positive strains are labelled by the antibody. Engagement of CD161c has been reported to have activating function in NK cells, whilst engagement of CD161b is inhibitory.				
	Mouse anti Mouse NK1.1 Antigen antibody, clone PK136 is useful for the identification of NK cells in selected strains of mice (positive on C57BL, FVB/N and NZB, but negative on AKR and BALB/c) and is also expressed by rare subsets of T cells and monocytes. Mouse anti Mouse NK1.1 antibody, clone PK136 has also been used for <i>in vivo</i> depletion of NK cells and <i>in vitro</i> activation of NK cells.				
Flow Cytometry	Use 10ul of the suggested working dilution to label 1 x 10 ⁶ cells in 100ul.				

References

- 1. Wang, M. *et al.* (1998) Natural killer cell depletion fails to influence initial CD4 T cell commitment in vivo in exogenous antigen-stimulated cytokine and antibody responses. <u>J Immunol</u>. 160 (3): 1098-105.
- 2. Koo, G.C. *et al.* (1986) The NK-1.1(-) mouse: a model to study differentiation of murine NK cells. <u>J Immunol. 137 (12): 3742-7.</u>
- 3. Kung, S.K. *et al.* (1999) The NKR-P1B gene product is an inhibitory receptor on SJL/J NK cells. <u>J Immunol</u>. 162 (10): 5876-87.
- 4. Carlyle, J.R. *et al.* (1999) Mouse NKR-P1B, a novel NK1.1 antigen with inhibitory function. J Immunol. 162 (10): 5917-23.
- 5. Carnemolla, B. *et al.* (2002) Enhancement of the antitumor properties of interleukin-2 by its targeted delivery to the tumor blood vessel extracellular matrix. Blood. 99: 1659-65.
- 6. Carpentier, A.F. *et al.* (1999) Oligodeoxynucleotides containing CpG motifs can induce rejection of a neuroblastoma in mice. Cancer Res. 59: 5429-32.
- 7. Sakai, T. *et al.* (2010) Inflammatory disease and cancer with a decrease in Kupffer cell numbers in Nucling-knockout mice. <u>Int J Cancer.</u> 126: 1079-94.
- 8. Svensson, L. *et al.* (2003) gammadelta T cells contribute to the systemic immunoglobulin E response and local B-cell reactivity in allergic eosinophilic airway inflammation. Immunology. 108 (1): 98-108.
- 9. Hazlett, L.D. *et al.* (2007) NKT cells are critical to initiate an inflammatory response after *Pseudomonas aeruginosa* ocular infection in susceptible mice. <u>J Immunol. 179:</u> 1138-46.
- 10. Joseph-Pietras, D. *et al.* (2006) Anti-tumoural activity of peripheral blood mononuclear cells against melanoma cells: discrepant in-vitro and in-vivo effects. <u>Melanoma Res. 16:</u> 325-33.
- 11. Gock, H. *et al.* (2014) Altered glycosylation in donor mice causes rejection of strain-matched skin and heart grafts. Am J Transplant. 14 (4): 797-805.
- 12. Khallouf, H. *et al.* (2012) 5-Fluorouracil and interferon-α immunochemotherapy enhances immunogenicity of murine pancreatic cancer through upregulation of NKG2D ligands and MHC class I. J Immunother. 35 (3): 245-53.
- 13. Ebbinghaus, C. *et al.* (2005) Engineered vascular-targeting antibody-interferon-gamma fusion protein for cancer therapy. <u>Int J Cancer. 116 (2): 304-13.</u>
- 14. Ekstrand-Hammarström, B. *et al.* (2011) Inhalation of alkylating mustard causes long-term T cell-dependent inflammation in airways and growth of connective tissue. Toxicology. 280 (3): 88-97.
- 15. Klezovich-Bénard M *et al.* (2012) Mechanisms of NK cell-macrophage *Bacillus anthracis* crosstalk: a balance between stimulation by spores and differential disruption by toxins. <u>PLoS Pathog. 8 (1): e1002481.</u>
- 16. Halin, C. *et al.* (2002) Enhancement of the antitumor activity of interleukin-12 by targeted delivery to neovasculature. <u>Nat Biotechnol. 20 (3): 264-9.</u>
- 17. Gustafsson, Å. *et al.* (2015) Differential cellular responses in healthy mice and in mice with established airway inflammation when exposed to hematite nanoparticles. <u>Toxicol Appl Pharmacol. 288 (1): 1-11.</u>
- 18. Flavell, D.J. *et al.* (2019) The TLR3 Agonist Poly Inosinic:Cytidylic Acid Significantly Augments the Therapeutic Activity of an Anti-CD7 Immunotoxin for Human T-cell Leukaemia. Biomedicines. 7 (1) Feb 16 [Epub ahead of print].
- 19. Miao, M. *et al.* (2021) Reevaluation of NOD/SCID Mice as NK Cell-Deficient Models. <u>Biomed Res Int. 2021: 8851986.</u>

Storage Store at -20°C only.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10162 available at: https://www.bio-rad-antibodies.com/SDS/MCA1266XZ 10162

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)

Goat Anti Mouse IgG IgA IgM (STAR87...)

Goat Anti Mouse IgG (STAR76...)

RPE

Goat Anti Mouse IgG (STAR70...)

FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) <u>FITC</u>
Goat Anti Mouse IgG (STAR77...) <u>HRP</u>

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Rabbit Anti Mouse IgG (STAR13...) HRP

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M365025:200529'

Printed on 08 Mar 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint