

## Datasheet: MCA1266SBB580

Description:	MOUSE ANTI MOUSE CD161 / NK1.1:StarBright Blue 580			
Specificity:	CD161 / NK1.1			
Format:	StarBright Blue 580			
Product Type:	Monoclonal Antibody			
Clone:	PK136			
Isotype:	lgG2a			
Quantity:	100 TESTS/0.5ml			

## **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 <u>www.bio-</u> rad-antibodies.com/protocols.						
	Flow Cytometry		No	Not Determined	Suggested Dilution Neat		
	Where this product 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 product 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 conjugated to StarBright Blue 580 - liquid						
Max Ex/Em	Fluorophore	Excitation Ma	ax (nm)	Emission Max (nm)			
	StarBright Blue 580	475		582			
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative Stabilisers	0.09% sodium azide ( 1% bovine serum albu 0.1% Pluronic F68 0.1% PEG 3350	•					

0.05% Tween 20

Immunogen	Spleen and bone marrow cells from CE mice.			
External Database Links	UniProt:			
	P27814 Related reagents			
	P27812 Related reagents			
	Entrez Gene:			
	17059 Kirb1c Related reagents			
	80782 Klrb1b Related reagents			
Synonyms	Ly55b, Ly55c, Nkrp1b, Nkrp1c			
Fusion Partners	Spleen cells from immunized (C3H x BALB/c) FI Hybrid were fused with cells of the Sp2/0			
	- Ag14 myeloma cell line.			
Specificity	<b>Mouse anti Mouse CD161 / NK1.1 antibody, clone PK136</b> 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.			
	amily. The WKT I surface antigen is also known as CD to th/CD to to and Ly-33.			
	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 ( <u>Wang <i>et al.</i> 2022</u> ) and <i>in vitro</i> activation of NK cells ( <u>Kung and Miller 1995</u> ).			
Flow Cytometry	Use 5µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.			
References	<ol> <li>Koo, G.C. <i>et al.</i> (1986) The NK-1.1(-) mouse: a model to study differentiation of murine NK cells. J Immunol. 137 (12): 3742-7.</li> <li>Kung, S.K. &amp; Miller RG (1995) The NK1.1 antigen in NK-mediated F1 antiparent killing <i>in vitro</i>. J Immunol. 154 (4): 1624-33.</li> <li>Wang, M. <i>et al.</i> (1998) Natural killer cell depletion fails to influence initial CD4 T cell commitment in vivo in exogenous antigen-stimulated cytokine and antibody responses. J</li> </ol>			

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# Further Reading1. Arase, N. et al. (1997) Association with FcRgamma is essential for activation signal<br/>through NKR-P1 (CD161) in natural killer (NK) cells and NK1.1+ T cells. J Exp Med. 186<br/>(12): 1957-63.

Storage Store at +4°C. DO NOT FREEZE.

	This product should be stored undiluted.
Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Health And Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA1266SBB580 20471
Regulatory	For research purposes only

## **Related Products**

## **Recommended Useful Reagents**

### MOUSE SEROBLOCK FcR (BUF041A) MOUSE SEROBLOCK FcR (BUF041B)

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
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M408855:221014'

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