

Datasheet: MCA1855 BATCH NUMBER 163088

Description:	MOUSE ANTI HUMAN CD161
Specificity:	CD161
Other names:	NKR-P1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	B199.2
Isotype:	lgG1
Quantity:	0.2 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				1/50 - 1/100
Immunohistology - Frozen				
Immunohistology - Paraffin				
ELISA				
Immunoprecipitation				
Western Blotting		•		

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	Human	
Product Form	Purified IgG - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein A supernatant	A from tissue culture
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	0.09% Sodium Azide	

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Purified human NK cells cultured in IL-2 (Bennett et al. 1996)
External Database Links	UniProt: Q12918 Related reagents Entrez Gene: 3820 KLRB1 Related reagents
Synonyms	CLEC5B, NKRP1A
RRID	AB_323331
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse P2X63.Ag8.653 myeloma cell line.
Specificity	Mouse anti Human CD161 antibody, clone B199.2 recognizes the human Killer cell lectin-like receptor subfamily B member 1, also known as CD161, C-type lectin domain family 5 member B, HNKR-P1a, NKR-P1A or Natural killer cell surface protein P1A. CD161 is a 225 amino acid ~25 kDa predicted molecular mass, single pass type II transmembrane glycoprotein with a single C-type lectin domain. CD161 is expressed by almost all NK cells and a subset of CD3+ve T cells (Lanier 1994). CD161, a member of the C-lectin is expressed as a disulphide bond-linked homodimeric cell surface protein, comprising two chains of ~40-44 kDa (Lanier et al. 1994). CD161 acts as a receptor for another c-type lectin, LLT1 with roles in the regulation of NK cell and T cell function (Aldemir et al. 2005). Mouse anti Human CD161 antibody, clone B199.2 cross-competes with and recognizes a similar epitope to the DX1 monoclonal antibody (Lanier et al. 1994).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	1. Bennett, I.M. <i>et al.</i> (1996) Definition of a natural killer NKR-P1A+/CD56-/CD16-functionally immature human NK cell subset that differentiates <i>in vitro</i> in the presence of interleukin 12. <u>J Exp Med. 184 (5): 1845-56.</u> 2. Azzoni, L. <i>et al.</i> (1998) Differential transcriptional regulation of CD161 and a novel gene, 197/15a, by IL-2, IL-15, and IL-12 in NK and T cells. <u>J Immunol. 161 (7): 3493-500.</u> 3. de Lalla, C. <i>et al.</i> (2011) Invariant NKT Cell Reconstitution in Pediatric Leukemia Patients Given HLA-Haploidentical Stem Cell Transplantation Defines Distinct CD4+ and CD4- Subset Dynamics and Correlates with Remission State. <u>J Immunol. 186: 4490-9.</u> 4. Huarte, E. <i>et al.</i> (2008) PILAR is a novel modulator of human T-cell expansion. <u>Blood. 112: 1259-68.</u>

- 5. Williams, P.J. *et al.* (2009) Altered decidual leucocyte populations in the placental bed in pre-eclampsia and foetal growth restriction: a comparison with late normal pregnancy. Reproduction. 138: 177-84.
- 6. Higai, K. *et al.* (2006) Binding of sialyl Lewis X antigen to lectin-like receptors on NK cells induces cytotoxicity and tyrosine phosphorylation of a 17-kDa protein. <u>Biochim Biophys Acta.</u> 1760 (9): 1355-63.
- 7. Birchall, M.A. *et al.* (2008) Immunologic response of the laryngeal mucosa to extraesophageal reflux. <u>Ann Otol Rhinol Laryngol.</u> 117: 891-5.
- 8. Bossard, C. *et al.* (2012) Plasmacytoid dendritic cells and Th17 immune response contribution in gastrointestinal acute graft-versus-host disease. Leukemia. 26: 1471-4.
- 9. Richter, J. *et al.* (2010) CD161 receptor participates in both impairing NK cell cytotoxicity and the response to glycans and vimentin in patients with rheumatoid arthritis. Clin Immunol. 136: 139-47.
- 10. Abrahamsson, S.V. *et al.* (2013) Non-myeloablative autologous haematopoietic stem cell transplantation expands regulatory cells and depletes IL-17 producing mucosal-associated invariant T cells in multiple sclerosis. Brain. 136: 2888-903.
- 11. Rother, S. *et al.* (2015) The c.503T>C Polymorphism in the Human KLRB1 Gene Alters Ligand Binding and Inhibitory Potential of CD161 Molecules. <u>PLoS One. 10 (8):</u> <u>e0135682.</u>

Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1855 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)

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

RPE

Goat Anti Mouse IgG (STAR76...)

RPE

Rabbit Anti Mouse IgG (STAR13...)

HRP

Goat Anti Mouse IgG (STAR70...)

FITC

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

<u>DyLight®650</u>, <u>DyLight®680</u>, <u>DyLight®800</u>,

FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) FITC

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

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

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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 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 'M396639:220614'

Printed on 19 Jan 2024

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