

## Datasheet: MCA1855

**BATCH NUMBER 163088**

<b>Description:</b>	MOUSE ANTI HUMAN CD161
<b>Specificity:</b>	CD161
<b>Other names:</b>	NKR-P1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	B199.2
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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.

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

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Purified human NK cells cultured in IL-2 ( <a href="#">Bennett et al. 1996</a> )
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q12918</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3820</a>    KLRB1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CLEC5B, NKRP1A
<b>RRID</b>	AB_323331
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse P2X63.Ag8.653 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD161 antibody, clone B199.2</b> recognizes the human Killer cell lectin-like receptor subfamily B member 1, also known as CD161, C-type lectin domain family 5 member B, HNKRP-1a, NKRP-1A 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 <a href="#">C-type lectin</a> domain. CD161 is expressed by almost all NK cells and a subset of CD3+ve T cells (<a href="#">Lanier 1994</a>).</p> <p>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 (<a href="#">Lanier et al. 1994</a>). CD161 acts as a receptor for another c-type lectin, LLT1 with roles in the regulation of NK cell and T cell function (<a href="#">Aldemir et al. 2005</a>).</p> <p>Mouse anti Human CD161 antibody, clone B199.2 cross-competes with and recognizes a similar epitope to the DX1 monoclonal antibody (<a href="#">Lanier et al. 1994</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>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. <a href="#">J Exp Med. 184 (5): 1845-56.</a></li> <li>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. <a href="#">J Immunol. 161 (7): 3493-500.</a></li> <li>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. <a href="#">J Immunol. 186: 4490-9.</a></li> <li>Huarte, E. <i>et al.</i> (2008) PILAR is a novel modulator of human T-cell expansion. <a href="#">Blood. 112: 1259-68.</a></li> </ol>

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. [Biochim Biophys Acta. 1760 \(9\): 1355-63.](#)
7. Birchall, M.A. *et al.* (2008) Immunologic response of the laryngeal mucosa to extraesophageal reflux. [Ann Otol Rhinol Laryngol. 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. [PLoS One. 10 \(8\): e0135682.](#)

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1855>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

- |   |  |
|---|--|
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>                              |
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>                              |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">Alk. Phos.</a> , <a href="#">HRP</a> |
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>                              |
| Goat Anti Mouse IgG (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>       |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>                              |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</a>                             |

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...) [FITC](#)

## Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

**North & South** Tel: +1 800 265 7376

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Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

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