

## Datasheet: MCA1855GA

|                      |                        |
|----------------------|------------------------|
| <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>     | 0.1 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](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 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.

|                                 |   |
|---------------------------------|---|
| <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 (NaN <sub>3</sub> )  |

|                                       |  |
|---------------------------------------|--|
| <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><br/> <a href="#">Q12918</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">3820</a>    KLRB1    <a href="#">Related reagents</a></p>   |
| <b>Synonyms</b>                       | CLEC5B, NKRP1A   |
| <b>RRID</b>                           | AB_324228  |
| <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 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl   |
| <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: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory** For research purposes only

## 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 (STAR70...)         | <a href="#">FITC</a>  |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">Alk. Phos.</a> , <a href="#">HRP</a>  |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>  |
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>   |
| Goat Anti Mouse IgG (H/L) (STAR117...)  | <a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a> |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>   |

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

## Recommended Negative Controls

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

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

**America** Fax: +1 919 878 3751

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

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

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

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto: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](https://bio-rad-antibodies.com/datasheets)

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