

Datasheet: MCA4661GA

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| Description: | MOUSE ANTI HUMAN DECTIN-1 |
| Specificity: | DECTIN-1 |
| Other names: | BETA GLUCAN RECEPTOR, CD369 |
| Format: | Purified |
| Product Type: | Monoclonal Antibody |
| Clone: | GE2 |
| Isotype: | IgG1 |
| Quantity: | 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.

| | Yes | No | Not Determined | Suggested Dilution |
|----------------------------|-----|----|----------------|--------------------|
| Flow Cytometry | ■ | | | 1/25 - 1/200 |
| 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.

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| Target Species | Human |
| Product Form | Purified IgG - liquid |
| 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 (NaN ₃) |

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| Carrier Free | Yes |
| Approx. Protein Concentrations | IgG concentration 1.0mg/ml |
| Immunogen | NIH3T3 cells expressing full length Beta-glucan receptor. |
| External Database Links | <p>UniProt: Q9BXN2 Related reagents</p> <p>Entrez Gene: 64581 CLEC7A Related reagents</p> |
| Synonyms | BGR, CLECSF12, DECTIN1 |
| RRID | AB_1658098 |
| Fusion Partners | Spleen cells from immunized C57BL/6 mice were fused with cells of the murine SP2 myeloma cell line. |
| Specificity | <p>Mouse anti Human Dectin-1 antibody, clone GE2 recognizes human Dectin-1, also known as beta-glucan receptor (βGR) , a C-type lectin domain family member. It is a major pathogen pattern-recognition receptor that binds beta-glucans, glucose polymers that form cell-wall components or exopolymers of yeasts, fungi and some bacteria. Beta-glucans have also been used experimentally and therapeutically as immunomodulators that enhance resistance to bacterial, yeast, viral and protozoan infections, as well as tumor formation. Dectin-1 also acts as a co-stimulatory molecule on T-cells to induce their proliferation and is necessary for the TLR2-mediated inflammatory response. It is highly expressed on peripheral blood leukocytes and dendritic cells.</p> <p>Human Dectin-1 has two major (βGR-A and βGR-B) and several minor isoforms. βGR-A and βGR-B differ by the presence and absence, respectively, of a stalk region. Mouse anti Human Dectin-1 antibody, clone GE2 recognizes both major isoforms. Clone GE2 could be used to inhibit receptor function.</p> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul. |
| References | <ol style="list-style-type: none"> 1. Harnack, U. <i>et al.</i> (2011) Yeast-derived beta-(1-3),(1-6)-D-glucan induces up-regulation of CD86 on dectin-1-positive human B-lymphoma cell lines. Anticancer Res. 31 (12): 4195-9. 2. Kyrnizi, I. <i>et al.</i> (2013) Corticosteroids block autophagy protein recruitment in <i>Aspergillus fumigatus</i> phagosomes via targeting dectin-1/Syk kinase signaling. J Immunol. 191 (3): 1287-99. 3. Loures, F.V. <i>et al.</i> (2015) Recognition of <i>Aspergillus fumigatus</i> hyphae by human plasmacytoid dendritic cells is mediated by dectin-2 and results in formation of extracellular traps. PLoS Pathog. 11 (2): e1004643. 4. Ali, M.F. <i>et al.</i> (2017) Canonical Stimulation of the NLRP3 Inflammasome by Fungal |

Antigens Links Innate and Adaptive B-Lymphocyte Responses by Modulating IL-1 β and IgM Production. [Front Immunol. 8: 1504.](#)

5. Kan, B. *et al.* (2018) Cellular metabolism constrains innate immune responses in early human ontogeny. [Nat Commun. 9 \(1\): 4822.](#)

6. de Quaglia E Silva. J.C.*et al.* (2019) Involvement of the Dectin-1 Receptor upon the Effector Mechanisms of Human Phagocytic Cells against *Paracoccidioides brasiliensis*. [J Immunol Res. 2019: 1529189.](#)

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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. |
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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/MCA4661GA 10040 |
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| Regulatory | For research purposes only |
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Related Products

Recommended Secondary Antibodies

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| Rabbit Anti Mouse IgG (STAR12...) | RPE |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | HRP |
| 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 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP |
| Rabbit Anti Mouse IgG (STAR9...) | FITC |
| Goat Anti Mouse IgG (STAR77...) | HRP |
| Goat Anti Mouse IgG (Fc) (STAR120...) | FITC , HRP |

Recommended Negative Controls

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

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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