

Datasheet: MCA4661PET

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| Description: | MOUSE ANTI HUMAN DECTIN-1:RPE |
| Specificity: | DECTIN-1 |
| Other names: | BETA GLUCAN RECEPTOR |
| Format: | RPE |
| Product Type: | Monoclonal Antibody |
| Clone: | GE2 |
| Isotype: | IgG1 |
| Quantity: | 25 TESTS |

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 | ▪ | | | |

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 conjugated to R. Phycoerythrin (RPE) - lyophilized | | |
| Reconstitution | Reconstitute with 0.25ml distilled water | | |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
| | RPE 488nm laser | 496 | 578 |
| Preparation | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant | | |
| Buffer Solution | Phosphate buffered saline | | |
| Preservative | 0.09% Sodium Azide (NaN ₃) | | |
| Stabilisers | 1% Bovine Serum Albumin | | |
| | 5% Sucrose | | |

Immunogen NIH3T3 cells expressing full length Beta-glucan receptor.

External Database Links

UniProt:

[Q9BXN2](#) [Related reagents](#)

Entrez Gene:

[64581](#) CLEC7A [Related reagents](#)

Synonyms BGR, CLECSF12, DECTIN1

RRID AB_2081664

Fusion Partners Spleen cells from immunised C57BL/6 mice were fused with cells of the murine SP2 myeloma cell line.

Specificity **Mouse anti Human Dectin-1 antibody, clone GE2** recognizes human Dectin-1, also known as beta-glucan receptor (β GR), 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.

Human Dectin-1 has two major (β GR-A and β GR-B) and several minor isoforms. β GR-A and β GR-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.

Flow Cytometry Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.

References

1. Willment, J.A. *et al.* (2005) The human beta-glucan receptor is widely expressed and functionally equivalent to murine Dectin-1 on primary cells. [Eur J Immunol. 35 \(5\): 1539-47.](#)
2. Harnack, U. *et al.* (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.](#)
3. Loures, F.V. *et al.* (2015) Recognition of *Aspergillus fumigatus* hyphae by human plasmacytoid dendritic cells is mediated by dectin-2 and results in formation of extracellular traps. [PLoS Pathog. 11 \(2\): e1004643.](#)
4. Kyrmizi, I. *et al.* (2013) Corticosteroids block autophagy protein recruitment in *Aspergillus fumigatus* phagosomes via targeting dectin-1/Syk kinase signaling. [J Immunol. 191 \(3\): 1287-99.](#)

Storage Prior to reconstitution store at +4°C.
After reconstitution store at +4°C.

DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

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| Guarantee | 12 months from date of reconstitution. |
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| Health And Safety Information | Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf |
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| Regulatory | For research purposes only |
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Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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| North & South America | Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: 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 | Europe | Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com |
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