

Datasheet: MCA4661GA

Description:	MOUSE ANTI HUMAN DECTIN-1
Specificity:	DECTIN-1
Other names:	BETA GLUCAN RECEPTOR
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.

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)

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 immunised 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. Willment, J.A. <i>et al.</i> (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. <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. 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. Kyrnizi, I. <i>et al.</i> (2013) Corticosteroids block autophagy protein recruitment in

Aspergillus fumigatus phagosomes via targeting dectin-1/Syk kinase signaling. [J Immunol. 191 \(3\): 1287-99.](#)

5. Ali, M.F. *et al.* (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.](#)

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: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Rabbit Anti Mouse IgG (STAR8...) [DyLight@800](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@550](#),
[DyLight@650](#), [DyLight@680](#), [DyLight@800](#),
[FITC](#), [HRP](#)

Recommended Negative Controls

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

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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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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