

Datasheet: MCA4661EL

BATCH NUMBER 173989

Description:	MOUSE ANTI HUMAN DECTIN-1:Low Endotoxin
Specificity:	DECTIN-1
Other names:	BETA GLUCAN RECEPTOR, CD369
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	GE2
Isotype:	IgG1
Quantity:	0.5 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	▪			Neat - 1/25
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Functional Assays	▪			

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	None present

Stabilisers

Carrier Free Yes

Endotoxin Level < 0.01 EU/ug

Approx. Protein Concentrations IgG concentration 1.0mg/ml

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_1658097

Fusion Partners Spleen cells from immunized 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. 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.](#)
2. Kyrnizi, 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.](#)
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. 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.](#)

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.](#)

Storage	Store at -20°C only. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10162 available at: https://www.bio-rad-antibodies.com/SDS/MCA4661EL
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
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 (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Low Endotoxin \(MCA928EL\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M367836:200529'

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