

# Datasheet: MCA4661GA BATCH NUMBER 152887

Description:	MOUSE ANTI HUMAN DECTIN-1
Specificity:	DECTIN-1
Other names:	BETA GLUCAN RECEPTOR
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	GE2
Isotype:	lgG1
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 <u>www.bio-rad-antibodies.com/protocols</u>.

		Yes	No	Not Determined	Suggested Dilution		
	Flow Cytometry				1/25 - 1/200		
	Immunohistology - Frozen			•			
	Immunohistology - Paraffin			•			
	ELISA			•			
	Immunoprecipitation						
	Western Blotting			•			
	Where this product has n	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 a						
	• •	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 salin	e					
Preservative Stabilisers	0.09% Sodium Azide (Na	N <sub>3</sub> )					

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	NIH3T3 cells expressing full length Beta-glucan receptor.
External Database Links	UniProt: <u>Q9BXN2</u> <u>Related reagents</u> Entrez Gene: <u>64581</u> CLEC7A <u>Related reagents</u>
Synonyms	BGR, CLECSF12, DECTIN1
RRID	
Fusion Partners	AB_1658098
Fusion Partners	Spleen cells from immunised C57BL/6 mice were fused with cells of the murine SP2 myeloma cell line.
Specificity	<b>Mouse anti Human Dectin-1 antibody, clone GE2</b> recognizes human Dectin-1, also known as beta-glucan receptor ( $\beta$ 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 ( $\beta$ GR-A and $\beta$ GR-B) and several minor isoforms. $\beta$ GR-A and $\beta$ 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 $1 \times 10^6$ cells in 100ul.
References	<ol> <li>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. <u>Eur J Immunol. 35 (5):</u> 1539-47.</li> <li>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. <u>Anticancer Res. 31 (12):</u> 4195-9.</li> <li>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. <u>PLoS Pathog. 11 (2): e1004643.</u></li> <li>Kyrmizi, I. <i>et al.</i> (2013) Corticosteroids block autophagy protein recruitment in</li> </ol>

	Aspergillus fumigatus phagosomes via targeting dectin-1/Syk kinase signaling. <u>J Immunol.</u> <u>191 (3): 1287-99.</u>
Storage	Store at +4°C or at -20°C if preferred.
	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	Material Safety Datasheet documentation #10040 available at:
Information	https://www.bio-rad-antibodies.com/SDS/MCA4661GA
	10040
Regulatory	For research purposes only

# **Related Products**

### **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12)	RPE			
Goat Anti Mouse IgG IgA IgM (STAR87) <u>HRP</u>				
Goat Anti Mouse IgG (STAR76)	RPE			
Goat Anti Mouse IgG (STAR70)	<u>FITC</u>			
Goat Anti Mouse IgG (H/L) (STAR117	.) <u>Alk. Phos.</u> , <u>DyLight®488</u> , <u>DyLight®550</u> ,			
	<u>DyLight®650</u> , <u>DyLight®680</u> , <u>DyLight®800</u> ,			
	<u>FITC</u> , <u>HRP</u>			
Goat Anti Mouse IgG (STAR77)	HRP			
Rabbit Anti Mouse IgG (STAR9)	<u>FITC</u>			
Goat Anti Mouse IgG (Fc) (STAR120)	) <u>FITC</u> , <u>HRP</u>			
Rabbit Anti Mouse IgG (STAR13)	HRP			
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**Recommended Negative Controls** 

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-ra	ad.com	Email: antibody_sales_uk@bio-ra	ad.com	Email: 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 M367839:200529'

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