

Datasheet: MCA2289BT

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| Description: | RAT ANTI MOUSE DECTIN-1:Biotin |
| Specificity: | DECTIN-1 |
| Format: | Biotin |
| Product Type: | Monoclonal Antibody |
| Clone: | 2A11 |
| Isotype: | IgG2b |
| Quantity: | 25 µg |

Product Details

RRID AB_2081657

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 - 1/10 |

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species Mouse

Product Form Purified IgG conjugated to Biotin - liquid

Preparation Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution Phosphate buffered saline

Preservative 0.09% Sodium Azide
Stabilisers 1% Bovine Serum Albumin

Approx. Protein Concentrations IgG concentration 0.1 mg/ml

Immunogen Dectin-1 transfected NIH3T3 cells and recombinant soluble Dectin-1.

External Database Links

UniProt:
[Q6QLQ4](#) [Related reagents](#)

Entrez Gene:
[56644](#) Clec7a [Related reagents](#)

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| Synonyms | Bgr, Clecsf12, Dectin1 |
| Fusion Partners | Spleen cells from immunised Fischer rats were fused with cells of the rat Y3 myeloma cell line |
| Specificity | <p>Rat anti Mouse Dectin-1 antibody, clone 2A11 recognizes murine beta-glucan receptor, also known as Dectin-1. Dectin-1 is predominantly expressed by cells of the monocyte/macrophage and neutrophil lineages, but also at lower levels by dendritic cells and a subpopulation of T cells.</p> <p>As a major leucocyte receptor for beta-glucan this molecule may have a key role in the immunomodulatory effects of beta-glucans and in the host response to fungal pathogens. Dectin-1 may stimulate reactive oxygen production in macrophages via the protein tyrosine kinase known as Syk.</p> <p>Rat anti Mouse Dectin-1 antibody, clone 2A11 inhibits the binding of zymosan to macrophages via the beta-glucan receptor.</p> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul |
| References | <ol style="list-style-type: none"> 1. Brown, G.D. <i>et al.</i> (2002) Dectin-1 is a major beta-glucan receptor on macrophages. J Exp Med. 196 (3): 407-12. 2. Taylor, P.R. <i>et al.</i> (2002) The beta-glucan receptor, dectin-1, is predominantly expressed on the surface of cells of the monocyte/macrophage and neutrophil lineages. J Immunol. 169 (7): 3876-82. 3. Reid, D.M. <i>et al.</i> (2004) Expression of the beta-glucan receptor, Dectin-1, on murine leukocytes in situ correlates with its function in pathogen recognition and reveals potential roles in leukocyte interactions. J Leukoc Biol. 76 (1): 86-94. 4. Underhill, D.M. <i>et al.</i> (2005) Dectin-1 activates Syk tyrosine kinase in a dynamic subset of macrophages for reactive oxygen production. Blood. 106 (7): 2543-50. 5. Lefevre, L. <i>et al.</i> (2010) PPARc Ligands Switched High Fat Diet-Induced Macrophage M2b Polarization toward M2a Thereby Improving Intestinal <i>Candida</i> Elimination PLoS One. 5(9):e12828. 6. Fei, M. <i>et al.</i> (2011) TNF-alpha from inflammatory dendritic cells (DCs) regulates lung IL-17A/IL-5 levels and neutrophilia versus eosinophilia during persistent fungal infection. Proc Natl Acad Sci U S A. 108 (13): 5360-5. 7. Gazi, U. <i>et al.</i> (2011) Fungal Recognition Enhances Mannose Receptor Shedding through Dectin-1 Engagement. J Biol Chem. 286: 7822-9. 8. McDonald, J.U. <i>et al.</i> (2011) <i>In vivo</i> functional analysis and genetic modification of <i>in vitro</i>-derived mouse neutrophils. FASEB J. 25 (6): 1972-82. 9. Dewals, B.G. <i>et al.</i> (2010) IL-4/alpha-independent expression of mannose receptor and Ym1 by macrophages depends on their IL-10 responsiveness. PLoS Negl Trop Dis. 4: e689. 10. Galès, A. <i>et al.</i> (2010) PPARgamma controls dectin-1 expression required for host antifungal defense against <i>Candida albicans</i>. PLoS Pathog. 6: e1000714. 11. Coates, P.J. <i>et al.</i> (2008) Indirect macrophage responses to ionizing radiation: implications for genotype-dependent bystander signaling. Cancer Res. 68: 450-6. 12. Dioszeghy, V. <i>et al.</i> (2008) 12/15-Lipoxygenase regulates the inflammatory response to bacterial products <i>in vivo</i>. J Immunol. 181: 6514-24. 13. Hohl, T.M. (2008) Caspofungin modulates inflammatory responses to <i>Aspergillus fumigatus</i> through stage-specific effects on fungal beta-glucan exposure. J Infect Dis. 198: 176-85. 14. Palma, A.S. <i>et al.</i> (2006) Ligands for the beta-glucan receptor, Dectin-1, assigned using "designer" microarrays of oligosaccharide probes (neoglycolipids) generated from glucan polysaccharides. J Biol Chem. 281: 5771-9. 15. Sindrilaru, A. <i>et al.</i> (2011) An unrestrained proinflammatory M1 macrophage population induced by iron impairs wound healing in humans and mice. J Clin Invest. 121: 985-97. 16. Anandasabapathy, N. <i>et al.</i> (2011) Flt3L controls the development of radiosensitive dendritic |

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| Storage | <p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p> |
| Guarantee | 18 months from date of despatch. |
| Health And Safety Information | Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf |
| Regulatory | For research purposes only |

Related Products

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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
'M343126:190110'

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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