Datasheet: MCA2289BT

BATCH NUMBER 160974

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

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 Stabilisers	0.09% Sodium Azide 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
Synonyms	Bgr, Clecsf12, Dectin1
RRID	AB_2081657
Fusion Partners	Spleen cells from immunised Fischer rats were fused with cells of the rat Y3 myeloma cell line
Specificity	**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. 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 macropahges via the protein tyrosine kinase known as Syk. Rat anti Mouse Dectin-1 antibody, clone 2A11 inhibits the binding of zymosan to macrophages via the beta-glucan receptor.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul
References	1. Brown, G.D. *et al.* (2002) Dectin-1 is a major beta-glucan receptor on macrophages. J Exp Med. 196 (3): 407-12. 2. Taylor, P.R. *et al.* (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. *et al.* (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. *et al.* (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. *et al.* (2010) PPARc Ligands Switched High Fat Diet-Induced Macrophage M2b Polarization toward M2a Thereby Improving Intestinal *Candida* Elimination PLoS One. 5(9):e12828. 6. Fei, M. *et al.* (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. *et al.* (2011) Fungal Recognition Enhances Mannose Receptor Shedding through Dectin-1 Engagement. J Biol Chem. 286: 7822-9. 8. McDonald, J.U. *et al.* (2011) *In vivo* functional analysis and genetic modification of *in*

vitro-derived mouse neutrophils. FASEB J. 25 (6): 1972-82.
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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. This product is photosensitive and should be protected from light.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2289BT 10041
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

MOUSE SEROBLOCK FcR (BUF041A)
MOUSE SEROBLOCK FcR (BUF041B)

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