

Monoclonal Antibody to CLEC7A / Dectin-1 - FITC

Alternate names: BGR, Beta-glucan receptor, C-type lectin domain family 7 member A, C-type lectin

superfamily member 12, CLECSF12, DC-associated C-type lectin 1, DECTIN1, Dendritic

cell-associated C-type lectin 1

Catalog No.:SM2052FSQuantity:50 μgConcentration:0.1 mg/ml

Background: 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.

Recent work has shown that Dectin-1 may stimulate reactive oxygen production in

macropahges via the protein tyrosine kinase known as Syk.

Uniprot ID: <u>Q6QLQ4</u>

NCBI: NP 064392.2

GenelD: <u>56644</u>

Host / Isotype: Rat / IgG2b

Clone: 2A11

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

Format: State: Liquid purified IgG fraction.

Purification: Affinity Chromatography on Protein G.

Buffer System: PBS, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA as

stabilizer.

Label: FITC - Fluorescein Isothiocyanate Isomer 1

Applications: Flow Cytometry.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

Specificity: Recognises Murine beta-Glucan Receptor (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. This antibody inhibits the binding of zymosan to macrophages via the beta-glucan receptor. The low endotoxin version SM2025LE is recommended for Functional Studies.

Species: Mouse.

Other species not tested.



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Storage:

Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

This product is photosensitive and should be protected from light.

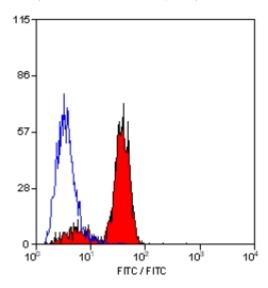
Should this product contain a precipitate we recommend microcentrifugation before use. Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General References: 1. Brown, G. D. et al. (2002) Dectin-1 is a major beta-glucan receptor on macrophages. J. Exp. Med. 196:407-412.

- 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. 169:3876-3882.
- 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. Leuk. Biol. 76:86-94.
- 4. Underhill, D.M. et al. (2005) Dectin-1 activates Syk tyrosine kinase in a dynamic subset of macrophages for reactive oxygen production. Blood 106:2543-2550.

Pictures:



Staining of mouse peripheral blood granulocytes with Rat Anti Mouse Beta Glucan Receptor:FITC (SM2052FS).