

## Monoclonal Antibody to CLEC7A / Dectin-1 - PE

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.: SM2025R Quantity: 100 Tests

Background: 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.

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>06QLQ4</u>

NCBI: <u>NP\_064392.2</u>

GeneID: 56644

Host / Isotype: Rat / IgG2b

Clone: 2A11

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

Spleen cells from immunised Fischer rats were fused with cells of the rat Y3 myeloma cell

line2

Format: State: Lyophilized purified IgG fraction.

Purification: Affinity Chromatography on Protein G.

**Buffer System:** PBS containing 0.09% Sodium Azide as preservative and 1% BSA and 5%

sucrose as stabilizers.

**Label:** PE – R. Phycoerythrin (RPE)

**Reconstitution:** Restore with 1 ml distilled water

Applications: Flow Cytometry (Neat -1/10): Use 10 ul of the suggested working dilution to label 10e6 cells

in 100 ul.

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).

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.



## SM2025R: Monoclonal Antibody to CLEC7A / Dectin-1 - PE

**Storage:** 

Store the antibody undiluted at 2-8°C.

## DO NOT FREEZE!

This product is photosensitive and should be protected from light.

Should this product contain a precipitate we recommend microcentrifugation before use.

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.