



# Anti-CLEC7A monoclonal antibody, clone GE2 [R-PE] (CABT-47563MH)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

### Product Overview

Mouse anti Human Dectin-1 antibody, clone GE2 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 differs by the presence and absence, respectively, of a stalk region. Mouse anti Human Dectin-1 antibody, clone GE2 recognizes both of these 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.

|                    |                                                           |
|--------------------|-----------------------------------------------------------|
| Specificity        | CLEC7A                                                    |
| Immunogen          | NIH3T3 cells expressing full length Beta-glucan receptor. |
| Isotype            | IgG1                                                      |
| Source/Host        | Mouse                                                     |
| Species Reactivity | Human                                                     |
| Clone              | GE2                                                       |
| Conjugate          | PE                                                        |
| Applications       | FC                                                        |

|                     |                                                                                                                                                                                                                                                                                              |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Format</b>       | Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilised                                                                                                                                                                                                                              |
| <b>Size</b>         | 100 tests                                                                                                                                                                                                                                                                                    |
| <b>Preservative</b> | 0.09% Sodium Azide                                                                                                                                                                                                                                                                           |
| <b>Storage</b>      | Prior to reconstitution store at +4°C. After reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use. |

## GENE INFORMATION

|                            |                                                                                                                                                                                                                                                                |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>           | <a href="#">CLEC7A C-type lectin domain family 7, member A [ Homo sapiens (human) ]</a>                                                                                                                                                                        |
| <b>Official Symbol</b>     | CLEC7A                                                                                                                                                                                                                                                         |
| <b>Synonyms</b>            | CLEC7A; C-type lectin domain family 7, member A; BGR; CANDF4; DECTIN1; CLECSF12; C-type lectin domain family 7 member A; dectin-1; beta-glucan receptor; lectin-like receptor 1; DC-associated C-type lectin 1; C-type lectin superfamily member 12; dendritic |
| <b>Entrez Gene ID</b>      | <a href="#">64581</a>                                                                                                                                                                                                                                          |
| <b>Protein Refseq</b>      | <a href="#">NP_072092</a>                                                                                                                                                                                                                                      |
| <b>UniProt ID</b>          | Q9BXN2                                                                                                                                                                                                                                                         |
| <b>Chromosome Location</b> | 12p13.2                                                                                                                                                                                                                                                        |
| <b>Pathway</b>             | Phagosome; Tuberculosis;                                                                                                                                                                                                                                       |
| <b>Function</b>            | MHC protein binding; carbohydrate binding; metal ion binding; signaling pattern recognition receptor activity;                                                                                                                                                 |