

## ARG23646 anti-CLEC7A antibody [GE2]

Package: 100 µg  
Store at: -20°C

### Summary

Product Description	<p>Mouse Monoclonal antibody [GE2] recognizes CLEC7A.</p> <p>This product 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 major isoforms. Clone GE2 could be used to inhibit receptor function.</p>
Tested Reactivity	Hu
Tested Application	FACS
Host	Mouse
Clonality	Monoclonal
Clone	GE2
Isotype	IgG1
Target Name	CLEC7A
Species	Human
Immunogen	NIH3T3 cells expressing full length CLEC7A.
Conjugation	Un-conjugated
Alternate Names	C-type lectin superfamily member 12; CD369; Dectin-1; Dendritic cell-associated C-type lectin 1; CLECSF12; CANDF4; BGR; Beta-glucan receptor; C-type lectin domain family 7 member A; DC-associated C-type lectin 1; DECTIN1

### Application Instructions

Application table	<table><thead><tr><th>Application</th><th>Dilution</th></tr></thead><tbody><tr><td>FACS</td><td>Neat - 1:10</td></tr></tbody></table>	Application	Dilution	FACS	Neat - 1:10
Application	Dilution				
FACS	Neat - 1:10				
Application Note	<p>FACS: Use 10 µl of the suggested working dilution to label 10<sup>6</sup> cells in 100 µl.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>				

### Properties

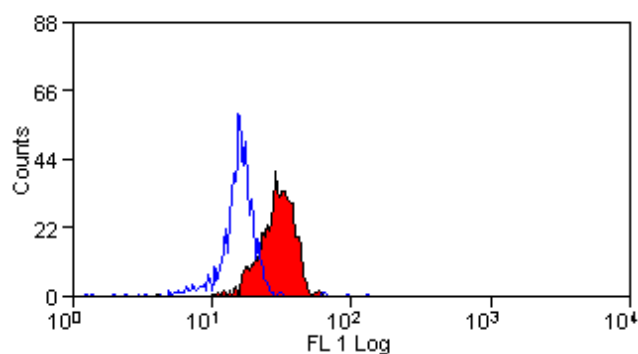
Form	Liquid
Purification	Purification with Protein G.

Buffer	PBS and 0.09% Sodium azide.
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Gene Symbol	CLEC7A
Gene Full Name	C-type lectin domain family 7, member A
Background	This gene encodes a member of the C-type lectin/C-type lectin-like domain (CTL/CTLD) superfamily. The encoded glycoprotein is a small type II membrane receptor with an extracellular C-type lectin-like domain fold and a cytoplasmic domain with an immunoreceptor tyrosine-based activation motif. It functions as a pattern-recognition receptor that recognizes a variety of beta-1,3-linked and beta-1,6-linked glucans from fungi and plants, and in this way plays a role in innate immune response. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. This gene is closely linked to other CTL/CTLD superfamily members on chromosome 12p13 in the natural killer gene complex region. [provided by RefSeq, Jul 2008]
Function	Lectin that functions as pattern receptor specific for beta-1,3-linked and beta-1,6-linked glucans, such as cell wall constituents from pathogenic bacteria and fungi. Necessary for the TLR2-mediated inflammatory response and for TLR2-mediated activation of NF-kappa-B. Enhances cytokine production in macrophages and dendritic cells. Mediates production of reactive oxygen species in the cell. Mediates phagocytosis of C.albicans conidia. Binds T-cells in a way that does not involve their surface glycans and plays a role in T-cell activation. Stimulates T-cell proliferation (By similarity). [UniProt]
Calculated Mw	28 kDa
PTM	Phosphorylated on tyrosine residues in response to glucan binding. [UniProt]

## Images



ARG23646 anti-CLEC7A antibody [GE2] FACS image

Flow Cytometry: Human peripheral blood monocytes stained with ARG23646 anti-CLEC7A antibody [GE2].