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CLEC7A Rabbit pAb

Catalog # AP96798

Product Information

Application	WB
Primary Accession	Q6QLQ4
Other Accession	Q6QLQ4
Reactivity	Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	27420
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse CLEC7A
Epitope Specificity	31-130/244
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 C-type lectin domain.
SUBUNIT	Homodimer. Interacts with SYK; participates in leukocyte activation in presence of fungal pathogens.
Post-translational modifications	on tyrosine residues in response to glucan binding.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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].

Additional Information

Other Names	BGR; CANDF4; CD369; CLECSF12; DECTIN1; SCARE2; beta-GR; Clec7b; RGD1565140; CLC7A_HUMAN; CLEC7A; Beta-glucan receptor; C-type lectin superfamily member 12; Dendritic cell-associated C-type lectin 1 (DC-associated C-type lectin 1 | Dectin-1); CLC7A_MOUSE; C-type lectin domain containing 7A; C-type (calcium dependent, carbohydrate-recognition domain) lectin, superfamily member 12; C-type lectin domain family 7, member A; C-type lectin domain family 7 member A

Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Clec7a {ECO:0000312|MGI:MGI:1861431}
Function	Lectin that functions as a pattern recognizing receptor (PRR) specific for beta-1,3-linked and beta-1,6-linked glucans, which constitute cell wall constituents from pathogenic bacteria and fungi (PubMed:11544516, PubMed:15213161, PubMed:17159984). Necessary for the TLR2-mediated inflammatory response and activation of NF-kappa-B: upon beta-glucan binding, recruits SYK via its ITAM motif and promotes a signaling cascade that activates some CARD domain-BCL10-MALT1 (CBM) signalosomes, leading to the activation of NF-kappa-B and MAP kinase p38 (MAPK11, MAPK12, MAPK13 and/or MAPK14) pathways which stimulate expression of genes encoding pro-inflammatory cytokines and chemokines (PubMed:12719479, PubMed:15731053, PubMed:16825490, PubMed:32358020). Enhances cytokine production in macrophages and dendritic cells (PubMed:15845454). Mediates production of reactive oxygen species in the cell (PubMed:12719479, PubMed:15731053, PubMed:16825490). Mediates phagocytosis of C.albicans conidia (PubMed:15729357, PubMed:16825490). Binds T-cells in a way that does not involve their surface glycans and plays a role in T-cell activation (PubMed:10779524). Stimulates T-cell proliferation (PubMed:10779524). Induces phosphorylation of SCIMP after binding beta-glucans (PubMed:27288407).
Cellular Location	Cell membrane; Single-pass type II membrane protein Note=Enriched on zymosan phagosomes. Enrichment does not depend on opsonization
Tissue Location	Detected in spleen (at protein level). Highly expressed in dendritic cells, spleen and thymus. Detected in epidermal Langerhans cells. Detected in macrophages, liver and lung

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