abcam

ab107572

Anti-DECTIN 2 antibody [IMG3D1]

Key facts

Isotype	IgG3
Host species	Mouse
Storage buffer	pH: 7.4 Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human CLEC6A aa 50-150. The exact immunogen used to generate this antibody is proprietary information. Database link Q6EIG7
Clone number	IMG3D1
Purification technique	Affinity purification Protein G
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-

Notes	Use 0.5 µg/5x10^5 cells. ab18392 - Mouse monoclonal IgG3, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	2-5 µg/mL
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	5 µg/mL
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Expected

Species	Mouse, Rat, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information CLEC6A

Function	Calcium-dependent lectin that acts as a pattern recognition receptor (PRR) of the innate immune system: specifically recognizes and binds alpha-mannans on C.albicans hypheas (PubMed:23911656, PubMed:28652405). Binding of C.albicans alpha-mannans to this receptor complex leads to phosphorylation of the immunoreceptor tyrosine-based activation motif (ITAM) of FCER1G, triggering activation of SYK, CARD9 and NF-kappa-B, consequently driving maturation of antigen-presenting cells and shaping antigen-specific priming of T-cells toward effector T-helper 1 and T-helper 17 cell subtypes (By similarity). Recognizes also, in a mannose-dependent manner, allergens from house dust mite and fungi, by promoting cysteinyl leukotriene production (By similarity). Recognizes soluble elements from the eggs of Shistosoma mansoni altering adaptive immune responses (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	Up to 6 months
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	DECTIN-2 also known as C-type lectin domain family 6 member A (CLEC6A) is a cell surface receptor that belongs to the C-type lectin family. It plays a significant role in the immune system by recognizing and binding to polysaccharides found on the

	surface of fungi such as alpha-mannans. DECTIN-2 is a type II transmembrane protein with an approximate molecular mass of 28 kDa. It is expressed mostly in dendritic cells and macrophages where it helps initiate immune responses against fungal pathogens.
Biological function summary	DECTIN-2 is a part of the innate immune system functioning through its association with the Fc receptor gamma chain to form a signaling complex. This interaction allows DECTIN-2 to transmit signals that lead to the activation of the NF-kB pathway which in turn stimulates the production of pro-inflammatory cytokines. The role of DECTIN-2 extends to influencing adaptive immunity as it helps in the maturation of dendritic cells and the proliferation of antigen-specific T cells.
Pathways	The DECTIN-2-mediated signaling integrates into the broader pattern recognition receptor pathways notably the C-type lectin receptor signaling pathway and the complement cascade. DECTIN-2 interacts closely with other proteins like DECTIN-1 another C-type lectin and complement protein C3 which together coordinate a more comprehensive immune response. These interactions enhance pathogen recognition and clearance emphasizing DECTIN-2's important position within the immune surveillance system.
Associated diseases and disorders	DECTIN-2 is particularly relevant in conditions such as fungal infections and autoimmune diseases. In fungal infections DECTIN-2 together with DECTIN-1 enhances the body's ability to detect and respond to pathogenic fungi reducing infection severity. Additionally abnormal DECTIN-2 signaling or expression may contribute to autoimmune disorders such as rheumatoid arthritis where overactive immune responses cause tissue damage. Understanding DECTIN-2's role could provide insight into potential therapeutic targets for managing these diseases.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

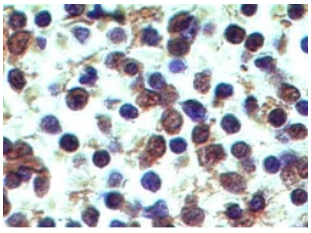
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

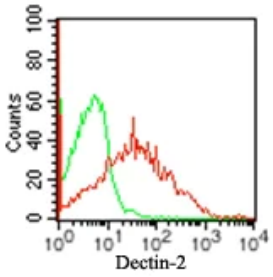
3 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DECTIN 2 antibody [IMG3D1] (ab107572)

DECTIN 2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-DECTIN 2 antibody

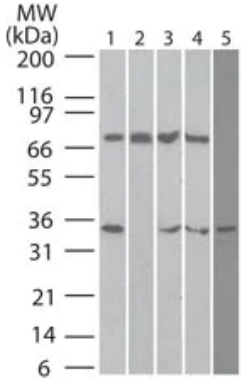
Immunohistochemical analysis of DECTIN 2 in formalin-fixed, paraffin-embedded human spleen tissue using ab107572 at 5 µg/ml.



Flow Cytometry - Anti-DECTIN 2 antibody [IMG3D1] (ab107572)

DECTIN 2 Flow Cytometry staining using mouse Anti-DECTIN 2 antibody

Cell surface flow cytometric analysis of DECTIN 2 expression by 5x10^5 human PBMCs using 0.5 µg of ab107572 in red and 0.5 µg of isotype control in green.



Western blot - Anti-DECTIN 2 antibody [IMG3D1] (ab107572)

All lanes:
Western blot - Anti-DECTIN 2 antibody [IMG3D1] (ab107572) at 2 µg/mL

Lane 1:
Human heart lysate

Lane 2:
Human heart lysate with immunizing peptide

Lane 3:
Mouse heart lysate

Lane 4:
Rat heart lysate

Lane 5:
Human Ramos cell lysate

Secondary

All lanes:
goat anti-mouse Ig HRP

Predicted band size: 23 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.