abcam

ab315329

Anti-CLEC4A antibody [EPR26969-125] - BSA and Azide free

Recombinant RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR26969-125
Purification technique	Affinity purification Protein A
Specificity	There is 51% homology between the antibody immunogen and the CLEC4C protein. IHC data suggests weak cross-reactivity with CLEC4C.
Concentration	1.013 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human, Transfected cell line - Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat, Transfected cell line - Human
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat, Transfected cell line - Human
Dilution info	-

Notes	-

WB

Not recommended

Species	Human, Mouse, Rat, Transfected cell line - Human
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Mouse, Rat, Transfected cell line - Human
Dilution info	-
Notes	-

Target data

See full target information CLEC4A

Function

C-type lectin receptor that binds carbohydrates mannose and fucose but also weakly interacts with N-acetylglucosamine (GlcNAc) in a Ca(2+)-dependent manner (PubMed:27015765). Involved in regulating immune reactivity (PubMed:10438934, PubMed:18258799). Once triggered by antigen, it is internalized by clathrin-dependent endocytosis and delivers its antigenic cargo into the antigen presentation pathway resulting in cross-priming of CD8(+) T cells. This cross-presentation and cross-priming are enhanced by TLR7 and TLR8 agonists with increased expansion of the CD8(+) T cells, high production of IFNG and TNF with reduced levels of IL4, IL5 and IL13 (PubMed:18258799, PubMed:20530286). In plasmacytoid dendritic cells, inhibits TLR9-mediated IFNA and TNF production (PubMed:18258799). May be involved via its ITIM motif (immunoreceptor tyrosine-based inhibitory motifs) in the inhibition of B-cell-receptor-mediated calcium mobilization and protein tyrosine phosphorylation (PubMed:10438934). (Microbial infection) Involved in the interaction between HIV-1 virus and dendritic cells. Enhances HIV-1 binding/entry and virus infection. Requires ITIM motif-associated signal transduction pathway involving phosphatases PTPN6 and PTPN11, SYK, Src kinases and MAP kinases.

Storage

Shipped at conditions	Blue Ice

Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

ab315329 is the carrier-free version of ab315328.

Patented technology

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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.

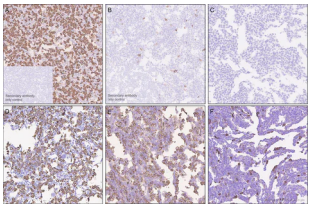
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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8 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CLEC4A antibody [EPR26969-125] - BSA and Azide free (ab315329)

CLEC4A Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CLEC4A antibody

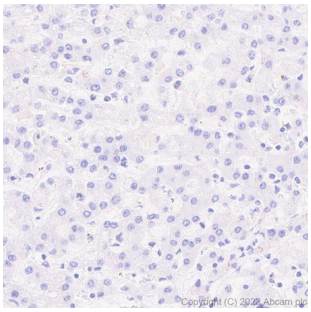
This data was developed using ab315328, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded (A, D) HEK-293T (human embryonic kidney epithelial cell) transfected with a human CLEC4A expression vector containing a his tag. (B, E) HEK-293T (human embryonic kidney epithelial cell) transfected with a human CLEC4C expression vector containing a his tag. (C, F) HEK-293T transfected with empty vector containing a his tag. Tissue labeling CLEC4A with ab315328 at 1/2000 (0.254 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on (A) HEK-293T transfected with a human CLEC4A expression vector containing a his tag. Weak staining on (B) HEK-293T transfected with a human CLEC4C expression vector containing a his tag. No staining on (C) HEK-293T transfected with empty vector containing a his tag. The section A, B, C was incubated with ab315328 for 30 mins at room temperature. The section D, E, F was incubated with anti-his tag antibody for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CLEC4A antibody [EPR26969-125] - BSA and Azide free (ab315329)

CLEC4A Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human liver using rabbit Anti-CLEC4A antibody

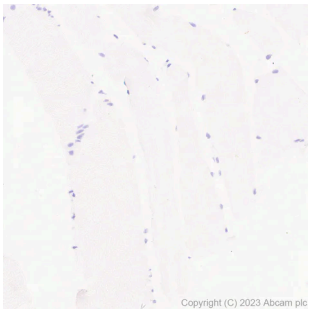
This data was developed using ab315328, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling CLEC4A with ab315328 at 1/2000 (0.254 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Negative control: no staining on human liver (PMID: 34409028). The section was incubated with ab315328 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CLEC4A antibody [EPR26969-125] - BSA and Azide free (ab315329)

CLEC4A Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human skeletal muscle using rabbit Anti-CLEC4A antibody

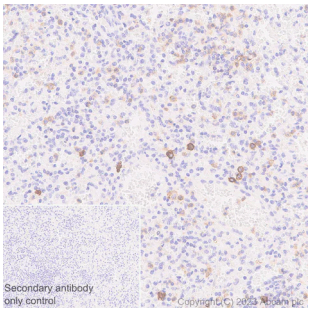
This data was developed using ab315328, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human skeletal muscle tissue labeling CLEC4A with ab315328 at 1/2000 (0.254 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Negative control: no staining on human skeletal muscle. The section was incubated with ab315328 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CLEC4A antibody [EPR26969-125] - BSA and Azide free (ab315329)

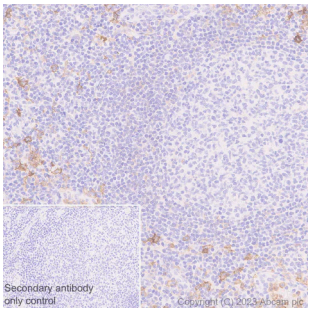
This data was developed using ab315328, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human spleen tissue labeling CLEC4A with ab315328 at 1/2000 (0.254 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on human spleen. The section was incubated with ab315328 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CLEC4A antibody [EPR26969-125] - BSA and Azide free (ab315329)

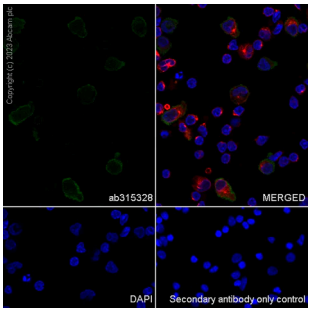
This data was developed using ab315328, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling CLEC4A with ab315328 at 1/2000 (0.254 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on human tonsil (PMID: 10438934). The section was incubated with ab315328 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunocytochemistry/ Immunofluorescence - Anti-CLEC4A antibody [EPR26969-125] - BSA and Azide free (ab315329)

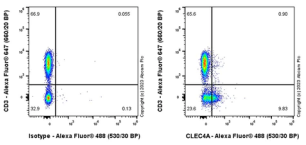
This data was developed using ab315328, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Tween-20 permeabilized Human PBMC (human primary peripheral blood mononuclear cell) cells labelling CLEC4A with ab315328 at 1/50 (10.06 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 ug/ml) dilution (Green).

Confocal image showing membranous staining in subsets of human PBMCs. Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5 ug/ml) dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 ug/ml) dilution.



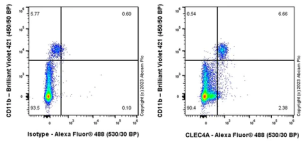
Flow Cytometry - Anti-CLEC4A antibody [EPR26969-125] - BSA and Azide free (ab315329)

This data was developed using ab315328, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of Human PBMC (human peripheral blood mononuclear cell) cells labelling CLEC4A with ab315328 at 1/500 dilution (0.1 ug, Right) compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control.

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells. Cells are co-stained with CD3 conjugated to Alexa Fluor®647.



Flow Cytometry - Anti-CLEC4A antibody [EPR26969-125] - BSA and Azide free (ab315329)

This data was developed using ab315328, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of Human PBMC (human peripheral blood mononuclear cell) cells labelling CLEC4A with ab315328 at 1/500 dilution (0.1 ug, Right) compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control.

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells. Cells are co-stained with CD11b conjugated to BV421.

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