abcam

ab308299

Anti-CLEC4A antibody [EPR26969-7] - 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	EPR26969-7
Purification technique	Affinity purification Protein A
Concentration	0.983 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Transfected cell lysate - Human
Dilution info	-

Notes	-

Expected

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

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

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

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

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

IHC-P

Not recommended

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

IP

Not recommended

Species	Human, Transfected cell lysate - Human, Mouse, Rat
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

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

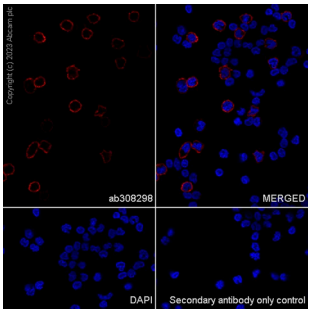
We do not recommend this combination. It is not covered by our product promise.

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.

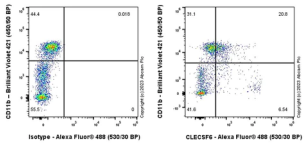
4 product images



Immunocytochemistry/ Immunofluorescence - Anti-CLEC4A antibody [EPR26969-7] - BSA and Azide free (ab308299)

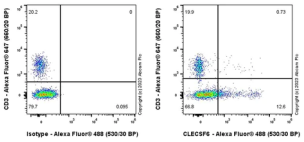
This data was developed using ab308298, the same antibody clone in a different buffer formulation.
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Tween-20 permeabilized human pbmc (human primary peripheral blood mononuclear cell) cells labelling CLEC4A with ab308298 at 1/50 (10.06 ug/ml) dilution, followed by ab150083 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 647) preadsorbed (ab150083) 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). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150083 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 647) preadsorbed (ab150083) at 1/1000 2 ug/ml dilution.

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



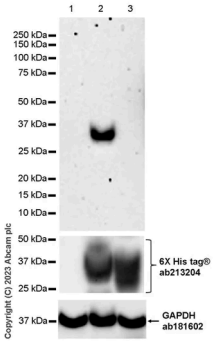
Flow Cytometry - Anti-CLEC4A antibody [EPR26969-7] - BSA and Azide free (ab308299)

This data was developed using ab308298, the same antibody clone in a different buffer formulation.
Flow cytometric analysis of human PBMC (human peripheral blood mononuclear cell) cells labelling CLEC4A with ab308298 at 1/50 dilution (1ug)/ Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat Anti-Rabbit IgG (Alexa Fluor ® 488, ab150081) at 1/5000 dilution was used as the secondary antibody. Cells were co-stained with anti-CD3 conjugated to 647. Gated on viable cells.



Flow Cytometry - Anti-CLEC4A antibody [EPR26969-7] - BSA and Azide free (ab308299)

This data was developed using ab308298, the same antibody clone in a different buffer formulation.
Flow cytometric analysis of human PBMC (human peripheral blood mononuclear cell) cells labelling CLEC4A with ab308298 at 1/50 dilution (1ug)/ Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat Anti-Rabbit IgG (Alexa Fluor ® 488, ab150081) at 1/5000 dilution was used as the secondary antibody. Cells were co-stained with anti-CD11b conjugated to BV421. Gated on viable cells.



Western blot - Anti-CLEC4A antibody [EPR26969-7] - BSA and Azide free (ab308299)

This data was developed using 308298, the same antibody clone in a different buffer formulation. Blocking and diluting buffer and concentration: 5% NFDM/TBST. This antibody does not cross-react with human CLEC4C. In Western blot, anti-His antibody (ab213204) staining at 1/5000 dilution. In Western blot, anti-GAPDH antibody (ab181602) loading control staining at 1/200000 dilution. Exposure time: 180 seconds
All lanes:
Western blot - Anti-CLEC4A antibody [EPR26969-7] (ab308298) at 1/1000 dilution

Lane 1:
293T cells transfected with an empty vector containi a His tag whole cell lysate at 20 µg

Lane 2:
293T cells transfected with a Human CLEC4A expression vector containi a His-tag whole cell lysate at 20 µg

Lane 3:
293T cells transfected with a Human CLEC4C expression vector containi a His-tag whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 27 kDa

Observed band size: 35 kDa

Exposure time: 180s

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