abcam

ab320720

Anti-CD300a antibody [EPR27995-84] - 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	EPR27995-84
Purification technique	Affinity purification Protein A
Concentration	0.991 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Dot

Tested

Species	Transfected cell line - Human
Dilution info	-

Notes	-

Expected

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

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

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

ICC/IF

Not recommended

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

WB

Not recommended

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

IHC-P

Not recommended

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

Target data

See full target information CD300A

Function Inhibitory receptor which may contribute to the down-regulation of cytolytic activity in natural killer (NK) cells, and to the down-regulation of mast cell degranulation (PubMed:10746781, PubMed:16339535, PubMed:9701027). Negatively regulates the Toll-like receptor (TLR) signaling mediated by MYD88 but not TRIF through activation of PTPN6 (PubMed:22043923).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

ab320720 is the carrier-free version of ab320719.

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

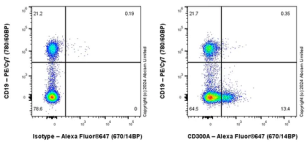
We do not recommend this combination. It is not covered by our product promise.

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.

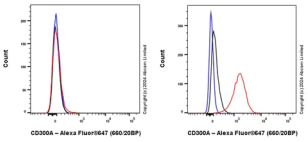
Full details and terms and conditions can be found here:
Terms & Conditions.

4 product images



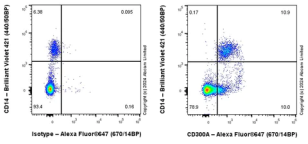
Flow Cytometry - Anti-CD300a antibody [EPR27995-84] - BSA and Azide free (ab320720)

This data was developed using ab320719, the same antibody clone in a different buffer formulation. Flow cytometric analysis of Human PBMC (human peripheral blood mononuclear cell) cells labelling CD300a with ab320719 at 1/5000 dilution (0.01ug) / Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control. Goat anti-Rabbit IgG (Alexa Fluor® 647, ab150083) at 1/5000 dilution was used as the secondary antibody. Cells were co-stained with anti human CD19 conjugated to PE/Cy7. Gated on viable Lymphocytes.



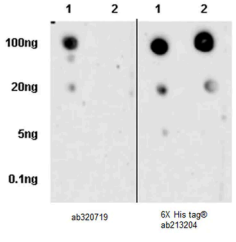
Flow Cytometry - Anti-CD300a antibody [EPR27995-84] - BSA and Azide free (ab320720)

This data was developed using ab320719, the same antibody clone in a different buffer formulation. Flow cytometric analysis of THP-1 (human monocytic leukemia monocyte) (Right) / 293T (human embryonic kidney epithelial cell) (Left) cells labelling CD300a with ab320719 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat anti-Rabbit IgG (Alexa Fluor® 647, ab150083) at 1/5000 dilution was used as the secondary antibody. Gated on viable cells. Negative control: 293T (PMID: 22043923).



Flow Cytometry - Anti-CD300a antibody [EPR27995-84] - BSA and Azide free (ab320720)

This data was developed using ab320719, the same antibody clone in a different buffer formulation. Flow cytometric analysis of Human PBMC (human peripheral blood mononuclear cell) cells labelling CD300a with ab320719 at 1/5000 dilution (0.01ug) / Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control. Goat anti-Rabbit IgG (Alexa Fluor® 647, ab150083) at 1/5000 dilution was used as the secondary antibody. Cells were co-stained with anti human CD14 conjugated to Brilliant Violet 421. Gated on viable cells.



Dot Blot - Anti-CD300a antibody [EPR27995-84] - BSA and Azide free (ab320720)

CD300a Dot Blot staining using rabbit Anti-CD300a antibody

This data was developed using ab320719, the same antibody clone in a different buffer formulation.

Dot blot analysis of CD300a using ab320719 at 1:1000 (0.496 ug/ml) followed by a Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1:100,000 dilution.

Lane 1: 293T cells transfected with a human CD300a expression vector containing a myc-His-tag® whole cell lysate.

Lane 2: 293T cells transfected with a human CD300c expression vector containing a myc-His-tag® whole cell lysate.

Blocking and diluting buffer and concentration: 5% NFDM/TBST

This antibody does not cross-react with overexpressed human CD300c by dot blot.

This blot was developed using a high sensitivity ECL substrate. The high-sensitivity ECL substrate used allows for the detection of proteins in the mid-femtogram range.
All lanes:
Dot Blot - Anti-CD300a antibody [EPR27995-84] (ab320719) at 1/1000 dilution

Lane 1:
293T cells transfected with a human CD300a expression vector containing a myc-His-tag® whole cell lysate

Lane 2:
293T cells transfected with a human CD300c expression vector containing a myc-His-tag® whole cell lysate

Secondary

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

Developed using the ECL technique.

Exposure time: 180s

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