abcam

ab272723

Anti-CRTAM antibody [EPR23786-12]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR23786-12
Purification technique	Affinity purification Protein A
Concentration	0.579 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1/2110
Notes	-

Expected

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

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

IHC-P

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information CRTAM

Function	Mediates heterophilic cell-cell adhesion which regulates the activation, differentiation and tissue retention of various T-cell subsets (By similarity). Interaction with CADM1 promotes natural killer (NK) cell cytotoxicity and IFNG/interferon-gamma secretion by CD8+ T-cells in vitro as well as NK cell-mediated rejection of tumors expressing CADM1 in vivo (PubMed:15811952). Regulates CD8+ T-cell proliferation in response to T-cell receptor (TCR) activation (By similarity). Appears to be dispensable for CD8+ T-cell-mediated cytotoxicity (By similarity). Interaction with SCRIB promotes the late phase of cellular polarization of a subset of CD4+ T-cells, which in turn regulates TCR-mediated proliferation and IFNG, IL17 and IL22 production (By similarity). By interacting with CADM1 on CD8+ dendritic cells, regulates the retention of activated CD8+ T-cells within the draining lymph node (By similarity). Required for the intestinal retention of intraepithelial CD4+ CD8+ T-cells and, to a lesser extent, intraepithelial and lamina propria CD8+ T-cells and CD4+ T-cells (By similarity). Interaction with CADM1 promotes the adhesion to gut-associated CD103+ dendritic cells, which may facilitate the expression of gut-homing and adhesion molecules on T-cells and the conversion of CD4+ T-cells into CD4+ CD8+ T-cells (By similarity).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

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.

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

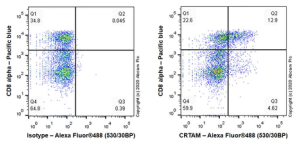
We do not recommend this combination. It is not covered by our product promise.

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



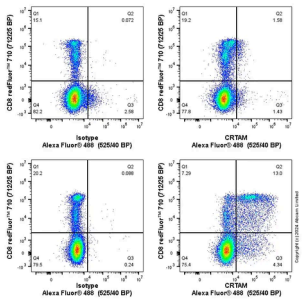
Flow Cytometry - Anti-CRTAM antibody [EPR23786-12] (ab272723)

CRTAM Flow Cytometry staining using rabbit Anti-CRTAM antibody

Flow cytometric analysis of Human peripheral blood mononuclear cells (PBMC) (treated with 1 ng/mL PMA and 0.2 µM Ionomycin for 5h) labelling CRTAM with ab272723 at 1/500 dilution (0.1ug) (Right) compared with a Rabbit monoclonal IgG (ab172730) isotype control (Left).
Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.

Cells were stained with rabbit IgG or ab272723. Then stained with anti-CD8 alpha conjugated to Pacific blue.

Gated on viable cells.



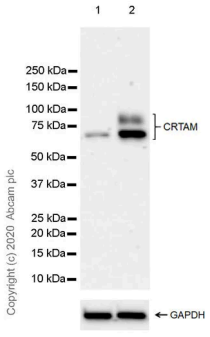
Flow Cytometry - Anti-CRTAM antibody [EPR23786-12] (ab272723)

CRTAM Flow Cytometry staining of human peripheral blood mononuclear cells (PBMCs) using rabbit Anti-CRTAM antibody

Flow cytometry staining of human peripheral blood mononuclear cells (PBMCs) (top) or PBMCs treated with 1ng/ml PMA 18 hr (bottom), with ab272723 (right) or Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (left). PBMCs were incubated for 30 mins on ice in 1x PBS containing 10 µg/ml human IgG and 10 % normal goat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody ab272723 or Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (1x 10^6 in 100 µl at 1.0 µg/ml (1/2110 dilution)) for 30 mins on ice. The cells were simultaneously stained with CD8.

The secondary antibody Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 dilution for 30 mins on ice

Acquisition of >30000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter. Events were gated on live cells.



Western blot - Anti-CRTAM antibody [EPR23786-12] (ab272723)

CRTAM Western blot staining using rabbit Anti-CRTAM antibody

The molecular weight observed is consistent with what has been described in the literature (PMID:10811014, 23637756, 16300832).
Blocking and diluting buffer and concentration: 5% NFDM/TBST.

All lanes:
Western blot - Anti-CRTAM antibody [EPR23786-12] (ab272723) at 1/1000 dilution

Lane 1:
Untreated human peripheral blood mononuclear cell (PBMC) whole cell lysate at 20 µg

Lane 2:
Human PBMC treated with 1ng/mL phorbol-12-myristate-13-acetate (PMA) (ab120297) and 0.2 µM ionomycin (ab120116) for 5 hours, whole cell lysate at 20 µg

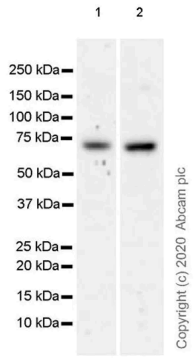
Secondary

All lanes:
Western blot - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/1000 dilution

Predicted band size: 45 kDa

Observed band size: 70 kDa, 85 kDa

Exposure time: 3min



Western blot - Anti-CRTAM antibody [EPR23786-12] (ab272723)

CRTAM Western blot staining using rabbit Anti-CRTAM antibody

The molecular weight observed is consistent with what has been described in the literature (PMID:10811014, 23637756, 16300832).
Blocking and diluting buffer and concentration: 5% NFDM/TBST.

All lanes:
Western blot - Anti-CRTAM antibody [EPR23786-12] (ab272723) at 1/1000 dilution

Lane 1:
Mouse thymus tissue lysate at 40 µg

Lane 2:
Rat cerebellum tissue lysate at 40 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/50000 dilution

Predicted band size: 45 kDa

Observed band size: 70 kDa

Exposure time: 3min

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