abcam

ab319123

Alexa Fluor® 488 Anti-LIGHT/TNFSF14 antibody [EPR23428-536]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 488
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR23428-536
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/500
Notes	-

Species	Mouse
Dilution info	1/500
Notes	-

Target data

See full target information TNFSF14

Function	Cytokine that binds to TNFRSF3/LTBR. Binding to the decoy receptor TNFRSF6B modulates its effects. Acts as a ligand for TNFRSF14/HVEM (PubMed:10754304, PubMed:9462508). Upon binding to TNFRSF14/HVEM, delivers costimulatory signals to T cells, leading to T cell proliferation and IFNG production (PubMed:10754304).

Storage

Shipped at conditions	Blue Ice
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, Store in the dark

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.

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Supplementary info

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

Activity summary	LIGHT also known as TNFSF14 is a member of the tumor necrosis factor (TNF) superfamily. It has an approximate mass of 24 kDa. You can find LIGHT expressed in various tissues including lymphoid tissues such as the spleen and lymph nodes. LIGHT serves as a ligand that can bind to receptors like lymphotoxin beta receptor (LTβR) and herpesvirus entry mediator (HVEM). Researchers have studied "mouse LIGHT" and "LIGHT protein" to understand its role in immune regulation. Additionally the term "anti-LIGHT" often refers to tools like antibodies used to investigate or inhibit LIGHT's activity.
Biological function summary	LIGHT plays a role in regulating immune responses and inflammation. It is part of a complex formed when it binds to its receptors influencing the proliferation and survival of immune cells such as T cells. LIGHT's interaction with HVEM can modulate T cell signaling cytokine production and dendritic cell maturation. It contributes to the organization of secondary lymphoid organs impacting immune surveillance and homeostasis. The presence of "APC LIGHT" indicates its involvement in antigen-presenting cell activities essential for adaptive immunity.
Pathways	LIGHT operates within the TNF receptor superfamily signaling pathway. This pathway involves other TNF members like TNF-α and lymphotoxin alfa which can also interact with LTβR. Another relevant pathway is the NF-kB signaling cascade which LIGHT activation can trigger. This cascade regulates gene expression related to immune response and cell survival. In connection to these pathways LIGHT's interaction with proteins like HVEM and LTβR helps maintain immune system balance.
Associated diseases and disorders	LIGHT has links to autoimmune diseases and cancer. Abnormal LIGHT signaling can contribute to conditions like rheumatoid arthritis where immune cell regulation becomes dysregulated. In cancer LIGHT may play a dual role by

promoting tumor immunity or conversely tumor progression depending on the context of its expression and receptor interaction. The LIGHT interaction network includes TNFRSF members and can influence pathological inflammatory responses when disrupted.

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

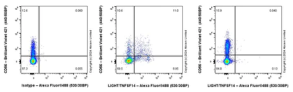
We do not recommend this combination. It is not covered by our product promise.

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.

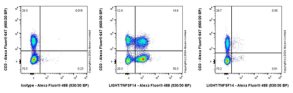
2 product images



Flow Cytometry - Alexa Fluor® 488 Anti-LIGHT/TNFSF14 antibody [EPR23428-536] (ab319123)

Flow cytometric analysis of Isotype control (Left) / Human peripheral blood mononuclear cell (PBMC) treated with 50ng/mL PMA and 500ng/mL Ionomycin for 24 hours (Middle) / Untreated control (Right) cells labelling LIGHT/TNFSF14 with ab319123 at 1/500 dilution (0.1ug) / Middle and Right compared with a Rabbit IgG monoclonal [EPR25A] - Isotype Control (Alexa Fluor® 488) (ab199091) / Left isotype control and an unlabelled control (cells without incubation with primary antibody) (Blue).

Cells were stained with anti-CD56 conjugated to BV421.
Gated on viable cells.



Flow Cytometry - Alexa Fluor® 488 Anti-LIGHT/TNFSF14 antibody [EPR23428-536] (ab319123)

Flow cytometric analysis of Isotype control (Left) / Mouse peripheral blood mononuclear cell (PBMC) treated with 50ng/mL PMA and 500ng/mL Ionomycin for 24 hours (Middle) / Untreated control (Right) cells labelling LIGHT/TNFSF14 with ab319123 at 1/500 dilution (0.1ug) / Middle and Right compared with a Rabbit IgG monoclonal [EPR25A] - Isotype Control (Alexa Fluor® 488) (ab199091) / Left isotype control and an unlabelled control (cells without incubation with primary antibody) (Blue).

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

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