abcam

ab305236

Anti-LIGHT/TNFSF14 antibody [EPR23428-536] - 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	EPR23428-536
Purification technique	Affinity purification Protein A
Concentration	1.011 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Not recommended

Species	Human, Mouse, Rat
Dilution info	-

Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human, Mouse
Dilution info	-
Notes	-

Not recommended

Species	Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-

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 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.

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.

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.

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.

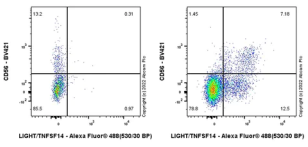
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

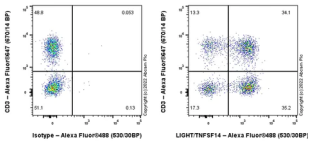
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3 product images



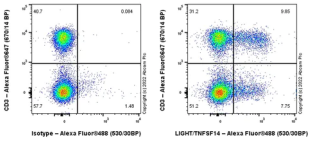
Flow Cytometry - Anti-LIGHT/TNFSF14 antibody [EPR23428-536] - BSA and Azide free (ab305236)

This data was developed using ab305235, the same antibody clone in a different buffer formulation. Flow cytometric analysis of Human peripheral blood mononuclear cell (PBMC) treated with 50ng/mL PMA and 500ng/mL Ionomycin for 24 hours (Right) / Untreated control (Left) cells labelling LIGHT/TNFSF14 with ab305235 at 1/500 dilution (0.1ug)/ Left and 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 1/2000 dilution was used as the secondary antibody. Cells were stained with rabbit IgG or ab305235. Then stained with anti-CD56 conjugated to BV421.Gated on viable cells.



Flow Cytometry - Anti-LIGHT/TNFSF14 antibody [EPR23428-536] - BSA and Azide free (ab305236)

This data was developed using ab305235, the same antibody clone in a different buffer formulation. Flow cytometric analysis of Mouse peripheral blood mononuclear cell (PBMC) treated with 50ng/mL PMA and 500ng/mL Ionomycin for 24 hours cells labelling LIGHT/TNFSF14 with ab305235 at 1/500 dilution (0.1ug)/ 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 1/2000 dilution was used as the secondary antibody. Cells were stained with rabbit IgG or ab305235. Then stained with anti-CD3 conjugated to Alexa Fluor® 647.Gated on viable cells.



Flow Cytometry - Anti-LIGHT/TNFSF14 antibody [EPR23428-536] - BSA and Azide free (ab305236)

This data was developed using ab305235, the same antibody clone in a different buffer formulation. Flow cytometric analysis of Mouse blood cells cells labelling LIGHT/TNFSF14 with ab305235 at 1/500 dilution (0.1ug)/ 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 1/2000 dilution was used as the secondary antibody. Cells were stained with rabbit IgG or ab305235. Then 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'.