abcam

ab318170

Alexa Fluor® 647 Anti-LTBR antibody [EPR26097-53]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 647
Excitation/Emission	Ex: 650nm, Em: 665nm
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	EPR26097-53
Purification technique	Affinity purification Protein A
Specificity	This antibody detects transfected levels of LTBR in western blot.
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	1/5000
Notes	-

ICC/IF

Not recommended

Species	Human
Dilution info	-
Notes	-

Target data

See full target information LTBR

Function	Receptor for the heterotrimeric lymphotoxin containing LTA and LTB, and for TNFS14/LIGHT (PubMed:24248355). Activates NF-kappa-B signaling pathway upon stimulation with lymphotoxin (LTA(1)-LTB(2)) (PubMed:24248355). Promotes apoptosis via TRAF3 and TRAF5. May play a role in the development of lymphoid organs.

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	LTBR (lymphotoxin beta receptor) also known as the TNFRSF3 is a significant protein that functions as a receptor for lymphotoxin and other related cytokines. The protein has a mass of around 62 kDa and is expressed in various tissues including lymphoid tissues and the epithelial cells of several organs. LTBR is present as a membrane-bound protein and helps mediate signaling that is important for cellular communication and function. Key interactions with ligands such as LTA and LIGHT activate signaling pathways which play roles in immune response.
Biological function summary	LTBR coordinates multiple cellular processes especially in immune regulation and homeostasis. It forms a complex with cytokines that binds to its extracellular domain triggering downstream signaling cascades. These cascades lead to activation of nuclear factor kappa B (NF-kB) which controls gene transcription and promotes survival and differentiation of immune cells. The capability of LTBR to interact with other TNF receptors expands its influence in lymphoid organogenesis and maintenance especially in maintaining the integrity of the lymphoid system.
Pathways	LTBR significantly participates in both the NF-kB and the non-canonical NF-kB pathways. These pathways are essential for regulating immune response and inflammation. Within these pathways LTBR interacts with other proteins such as TRAF3 and TRAF2 to mediate signaling processes. This arrangement allows for

	modulation of immune responses and is critical for recognizing and eliminating pathogens. Additionally the involvement of LTBR in immune system pathways aligns it with the functions of closely related proteins like TNF receptor superfamily members.
Associated diseases and disorders	LTBR has been implicated in autoimmune diseases and cancer. In autoimmunity aberrant signaling through LTBR may lead to inappropriate immune responses and inflammation as seen in disorders like systemic lupus erythematosus. Moreover in oncology abnormalities in LTBR signaling can influence tumor microenvironments and support tumor cell survival. Throughout these disease contexts LTBR often interacts with other risk-associated proteins such as NFKB1 highlighting its integration in complex pathological processes.

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

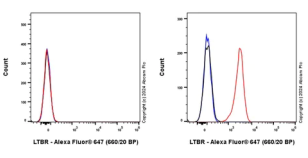
We do not recommend this combination. It is not covered by our product promise.

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.

1 product image



Flow Cytometry - Alexa Fluor® 647 Anti-LTBR antibody [EPR26097-53] (ab318170)

Flow cytometric analysis of Jurkat (human T cell leukemia T lymphocyte from peripheral blood, Left) / HeLa (human cervical adenocarcinoma epithelial cell, Right) cells labelling LTBR with ab318170 at 1/5000 dilution(0.01ug)/Red compared with a Rabbit IgG monoclonal [EPR25A] -

Isotype Control (Alexa Fluor® 647) (ab199093) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Gated on viable cells.
Negative control: Jurkat (PMID: 10200501).

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