abcam

ab244552

Anti-ILT-3 antibody [EPR22030] - 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	EPR22030
Purification technique	Affinity purification Protein A
Concentration	0.917 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

WB

Not recommended

Species	Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human
Dilution info	-
Notes	-

Target data

See full target information LILRB4

Function	Inhibitory receptor involved in the down-regulation of the immune response and the development of immune tolerance (PubMed:11875462). Receptor for FN1 (PubMed:34089617). Receptor for apolipoprotein APOE (PubMed:30333625). Receptor for ALCAM/CD166 (PubMed:29263213). Inhibits receptor-mediated phosphorylation of cellular proteins and mobilization of intracellular calcium ions (PubMed:9151699). Inhibits FCGR1A/CD64-mediated monocyte activation by inducing phosphatase-mediated down-regulation of the phosphorylation of multiple proteins including LCK, SYK, LAT and ERK, leading to a reduction in TNF production (PubMed:19833736). This inhibition of monocyte activation occurs at least in part via binding to FN1 (PubMed:34089617). Inhibits T cell proliferation, inducing anergy, suppressing the differentiation of IFNG-producing CD8+ cytotoxic T cells and enhancing the generation of CD8+ T suppressor cells (PubMed:16493035, PubMed:19833736, PubMed:29263213). Induces up-regulation of CD86 on dendritic cells (PubMed:19860908). Interferes with TNFRSF5-signaling and NF-kappa-B up-regulation (PubMed:11875462).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab244552 is the carrier-free version of ab224716.

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.

Supplementary info

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

Activity summary	ILT-3 also known as Immunoglobulin-like transcript 3 is a protein predominantly expressed on dendritic cells and monocytes. It is a type I transmembrane protein belonging to the leukocyte immunoglobulin-like receptor family. The ILT-3 protein has a molecular mass of approximately 60 kDa. In addition to its presence on dendritic cells and monocytes ILT-3 can be detected in low levels on some types of macrophages. It plays a regulatory role in the immune system which can influence how the body responds to pathogens and tissue damage.
Biological function summary	ILT-3 acts as an inhibitory receptor that modulates immune responses. It is often linked with the control of T cell activation and the maintenance of immune tolerance. ILT-3 does not form part of a larger protein complex. Its inhibitory function helps in preventing overactivation of the immune system by modulating the signaling pathways necessary for immune response. This modulation occurs through ITIM (Immunoreceptor Tyrosine-based Inhibitory Motif) domains that recruit phosphatases helping in dephosphorylating key signaling proteins and aiding in downregulation of immune cell activities.
Pathways	The ILT-3 protein is involved in important immune regulatory pathways contributing significantly to the immune checkpoint pathway. It interacts with other immunoglobulin-like receptors and is known to influence pathways involving PD-1 (Programmed cell death protein 1) and CTLA-4 (Cytotoxic T-lymphocyte-associated protein 4). By affecting these pathways ILT-3 serves as a checkpoint that ensures immune homeostasis prevents excess inflammation and influences the balance between immune activation and suppression within the body.
Associated diseases and disorders	ILT-3 has been implicated in autoimmune diseases and transplant rejection. It helps in suppressing immune responses that can lead to conditions like rheumatoid arthritis and could negatively affect organ transplant outcomes by minimizing the chance of rejection. ILT-3's role in these conditions connects it to proteins such as HLA-G and PD-L1 which are also involved in immune modulation and contribute to disease pathogenesis. Understanding ILT-3’s role provides insights into potential therapeutic targets for these diseases.

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.

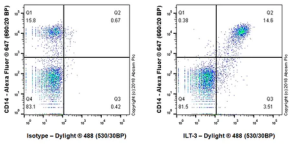
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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1 product image



Flow Cytometry - Anti-ILT-3 antibody [EPR22030] - BSA and Azide free (ab244552)

ILT-3 Flow Cytometry staining using rabbit Anti-ILT-3 antibody

Flow cytometric analysis of human peripheral blood mononuclear cells (PBMCs) labeling ILT-3 with ab224716 at 1/600 dilution (right panel) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) (left panel). Goat Anti-Rabbit IgG H&L (Dylight® 488) (ab98462) at 1/2000 dilution was used as the secondary antibody.
Cells were stained with Alexa Fluor® 647-conjugated CD14 (a monocyte marker) and rabbit IgG (left, ab172370) or anti-ILT-3 RabMAb (right, ab224716). Data shown was gated on viable cells.

The ILT-3 expression pattern has been described in literature (PMID:17266150; PMID:9151699).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab224716).

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