abcam

ab230663

PE Anti-ILT-7 antibody [17G10.2]

Anti-ILT-7 antibody [17G10.2] conjugated to PE - suitable for flow cytometry, and reacts with human samples. Clone [17G10.2] is a mouse monoclonal antibody.

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Key facts

Isotype	IgG1
Host species	Mouse
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	pH: 7.4 Preservative: 0.0975% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing LILRA4 protein. The exact immunogen used to generate this antibody is proprietary information. Database link P59901
Clone number	17G10.2
Purification technique	Size-exclusion chromatography
Purification notes	Purified from TCS. Purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	10 µL for 10^6 Cells
Notes	(or 100 µl of whole blood).

Target data

See full target information LILRA4

Function	Functions coreceptor to limit the innate immune responses to viral infections; signaling occurs via FCER1G (PubMed:16735691, PubMed:19564354). Down-regulates the production of IFNA1, IFNA2, IFNA4, IFNB1 and TNF by plasmacytoid dendritic cells that have been exposed to influenza virus or cytidine-phosphate-guanosine (CpG) dinucleotides, indicating it functions as a negative regulator of TLR7 and TLR9 signaling cascades (PubMed:16735691, PubMed:19564354, PubMed:24586760). Down-regulates interferon production in response to interaction with BST2 on HIV-1 infected cells (PubMed:26172439). Activates a signaling cascade in complex with FCER1G that results in phosphorylation of Src family and Syk kinases and thereby triggers mobilization of intracellular Ca(2+) (PubMed:16735691, PubMed:19564354). Does not interfere with the differentiation of plasmacytoid dendritic cells into antigen-presenting cells (PubMed:24586760).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Store in the dark

Supplementary info

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

Activity summary	ILT-7 also known as LILRA4 is an important receptor involved in the immune response. It is expressed on plasmacytoid dendritic cells and holds significant weight approximately 38 kDa. The receptor is part of the immunoglobulin-like transcript family containing unique extracellular domains that interact with specific ligands. ILT-7 is known for its role in mediating signals that shape the behavior of immune cells particularly in antiviral defenses.

Biological function summary	ILT-7 plays an important role in the regulation of type I interferon production in dendritic cells. This receptor forms a complex with the Fc epsilon RI gamma chain which transmits activation signals inside the cell. In resting conditions ILT-7 helps maintain immune homeostasis by regulating the release of interferons therefore balancing immune activation and controlling potential overactivity that might lead to autoimmunity.
Pathways	ILT-7 interacts within the signaling network of toll-like receptor (TLR) pathways. It closely ties with TLR9 a protein that recognizes unmethylated CpG motifs often found in viral DNA enhancing the production of interferons during viral infections. This collaboration establishes a link between pathogen recognition and immune response modulation within dendritic cells assisting in orchestrating a potent defense against viral pathogens.
Associated diseases and disorders	ILT-7 has connections to systemic lupus erythematosus and chronic viral infections. Dysregulation of ILT-7 expression or function can lead to excessive interferon production contributing to the pathology of lupus. In chronic viral infections ILT-7 interaction with proteins like TLR9 and the subsequent dysregulation can support viral persistence or worsen disease outcomes by altering immune responses. Understanding ILT-7's roles offers insights into therapeutic targets for modulating immune response in 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

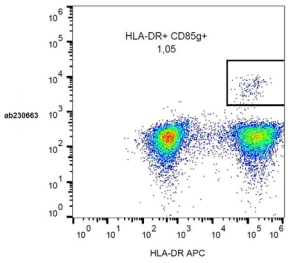
We do not recommend this combination. It is not covered by our product promise.

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.

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1 product image



Flow Cytometry - PE Anti-ILT-7 antibody [17G10.2] (ab230663)

ILT-7 Flow Cytometry staining using mouse Anti-ILT-7 antibody

Flow cytometric of human peripheral blood labeling ILT-7 with ab230663.

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