

Product datasheet

Anti-LAIR1 antibody [113] - Low endotoxin, Azide free ab171239

[1 References](#) [1 Image](#)

Overview

Product name	Anti-LAIR1 antibody [113] - Low endotoxin, Azide free
Description	Armenian hamster monoclonal [113] to LAIR1 - Low endotoxin, Azide free
Host species	Armenian hamster
Tested applications	Suitable for: Flow Cyt
Species reactivity	Reacts with: Mouse
Immunogen	The details of the immunogen for this antibody are not available.
Positive control	Mouse splenocytes.
General notes	<p>Endotoxin Level: Less than 0.001 ng/μg antibody, as determined by the LAL assay.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Constituent: 100% PBS
Carrier free	Yes
Purity	Protein G purified
Clonality	Monoclonal
Clone number	113
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab171239 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use at an assay dependent concentration. ab171239 can be used at less than or equal to 0.25µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10e5 to 10e8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Target

Function

Functions as an inhibitory receptor that plays a constitutive negative regulatory role on cytolytic function of natural killer (NK) cells, B-cells and T-cells. Activation by Tyr phosphorylation results in recruitment and activation of the phosphatases PTPN6 and PTPN11. It also reduces the increase of intracellular calcium evoked by B-cell receptor ligation. May also play its inhibitory role independently of SH2-containing phosphatases. Modulates cytokine production in CD4+ T-cells, downregulating IL2 and IFNG production while inducing secretion of transforming growth factor beta. Down-regulates also IgG and IgE production in B-cells as well as IL8, IL10 and TNF secretion. Inhibits proliferation and induces apoptosis in myeloid leukemia cell lines as well as prevents nuclear translocation of NF-kappa-B p65 subunit/RELA and phosphorylation of I-kappa-B alpha/CHUK in these cells. Inhibits the differentiation of peripheral blood precursors towards dendritic cells.

Tissue specificity

Expressed on the majority of peripheral mononuclear cells, including natural killer (NK) cells, T-cells, B-cells, monocytes, and dendritic cells. Highly expressed in naive T-cells and B-cells but no expression on germinal center B-cells. Abnormally low expression in naive B-cells from HIV-1 infected patients. Very low expression in NK cells from a patient with chronic active Epstein-Barr virus infection.

Sequence similarities

Contains 1 Ig-like C2-type (immunoglobulin-like) domain.

Developmental stage

Complete loss of expression when naive B-cells proliferates and differentiates into Ig-producing plasma cells under in vitro stimulation.

Domain

ITIM (immunoreceptor tyrosine-based inhibitor motif) motif is a cytoplasmic motif present in 2 copies in the intracellular part of LAIR1. When phosphorylated, ITIM motif can bind the SH2 domain of several SH2-containing phosphatases, leading to down-regulation of cell activation.

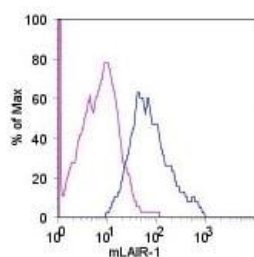
Post-translational modifications

Phosphorylation at Tyr-251 and Tyr-281 activates it. May be phosphorylated by LCK.
N-glycosylated.

Cellular localization

Cell membrane.

Images



Flow Cytometry - Anti-LAIR1 antibody [113] - Low endotoxin, Azide free (ab171239)

Flow cytometry analysis of C57B1/6 splenocytes (total viable F4/80 positive cells) labelling LAIR1 with ab171239 at 0.125µg (blue line) and with Purified Armenian Hamster IgG control (purple line), followed by anti-Armenian Hamster IgG PE.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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