abcam

Product datasheet

PerCP/Cy5.5® Anti-LAIR1 antibody [NKTA255] ab234263

1 Image

Overview

Product name PerCP/Cy5.5® Anti-LAIR1 antibody [NKTA255]

Description PerCP/Cy5.5® Mouse monoclonal [NKTA255] to LAIR1

Host species Mouse

Conjugation PerCP/Cy5.5®. Ex: 482nm, Em: 690nm

Tested applications
Suitable for: Flow Cyt
Species reactivity
Reacts with: Human

Immunogen Tissue, cells or virus corresponding to Human LAIR1. Activated NK cells and CD3- thymocytes.

Positive control Flow Cytometry: Human peripheral blood.

General notes

This product or portions thereof is manufactured under license from Carnegie Mellon University

under U.S. Patent Number 5, 268, 486 and related patents. Cy® and CyDye® are trademarks of

Cytiva.

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.

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Store In the Dark.

Storage buffer pH: 7.4

Preservative: 0.0975% Sodium azide

Constituent: PBS

Purity Size exclusion

Purification notes ab234263 is conjugated with tandem dye PerCP-Cy™5.5 under optimum conditions. The

conjugate is purified by size-exclusion chromatography and adjusted for direct use.

Clonality Monoclonal

1

Clone number NKTA255

Isotype lgG1

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab234263 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 4µl for 10 ⁶ cells. (or 100 µL whole blood)

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 lg-like C2-type (immunoglobulin-like) domain.

Developmental stage

Complete loss of expression when naive B-cells proliferates and differentiates into lg-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

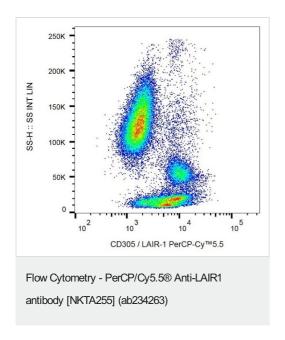
Phosphorylation at Tyr-251 and Tyr-281 activates it. May be phosphorylated by LCK.

N-glycosylated.

Cellular localization

Cell membrane.

Images



Flow cytometric analysis of surface stained human peripheral blood cells, labeling LAIR1 with ab234263 at 4 μL per 10^6 cells. Lymphocyte gate.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors