# abcam

### Product datasheet

# PE Anti-LAIR1 antibody [113] ab95749

1 References 1 Image

Overview

Product name PE Anti-LAIR1 antibody [113]

**Description** PE Armenian hamster monoclonal [113] to LAIR1

Host species Armenian hamster

**Conjugation** PE. Ex: 488nm, Em: 575nm

Tested applications Suitable for: Flow Cyt

Species reactivity Reacts with: Mouse

Immunogen Tissue, cells or virus corresponding to Mouse LAIR1. ARHO12 clone stably expressing Mouse

LAIR1 fused to a C terminal MYC tag.

Positive control C57BL/6 splenocytes

General notes

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.

Storage buffer pH: 7.20

Preservative: 0.09% Sodium azide

**Purity** Protein G purified

**Clonality** Monoclonal

Clone number 113
Isotype IgG

**Applications** 

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### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab95749 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 0.125-0.25µg for 10 <sup>5-8</sup> cells. A 100 µl volume is recommended for staining the cell sample.

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#### **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

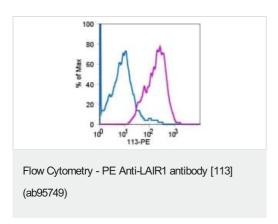
Phosphorylation at Tyr-251 and Tyr-281 activates it. May be phosphorylated by LCK.

N-glycosylated.

#### **Cellular localization**

Cell membrane.

#### **Images**



FLow cytometry staining of C57BL/6 splenocytes with 0.125  $\mu g$  of Armenian Hamster IgG Isotype Control PE (blue histogram) or 0.125  $\mu g$  ab95749 (purple histogram). Total viable F4/80+ cells were used for analysis.

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

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- · Replacement or refund for products not performing as stated on the datasheet
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