


Product datasheet

Anti-LAIR1 antibody ab197804

1 Image

Overview

<b>Product name</b>	Anti-LAIR1 antibody
<b>Description</b>	Rabbit Polyclonal to LAIR1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse <b>Predicted to work with:</b> Rat 
<b>Immunogen</b>	Fusion protein within Human LAIR1 (internal sequence). The exact sequence is proprietary. Fusion protein corresponding to a region derived from internal residues of human LAIR1. The fusion partner is GST. Database link: <a href="#">Q6GTX8</a>
<b>Positive control</b>	Mouse liver tissue lysate
<b>General notes</b>	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

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.4 Preservative: 0.05% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine)
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab197804 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
WB		1/500 - 1/2000. Predicted molecular weight: 31 kDa.

## 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.

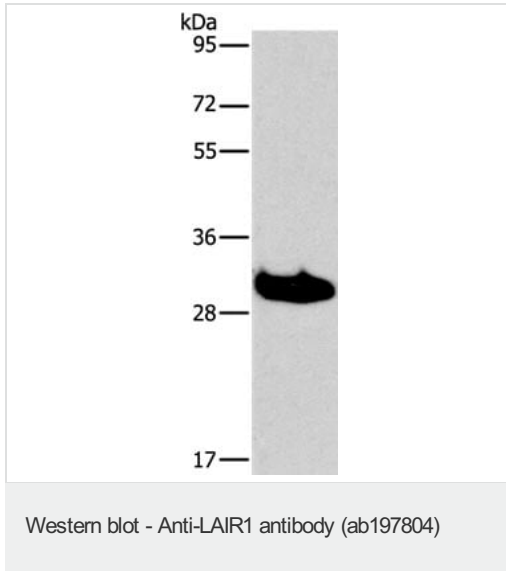
### Post-translational modifications

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

### Cellular localization

Cell membrane.

## Images



Anti-LAIR1 antibody (ab197804) at 1/550 dilution + mouse liver tissue lysate at 40 µg

**Predicted band size:** 31 kDa

**Exposure time:** 30 seconds

**Gel:** 15%SDS-PAGE

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

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