

Product datasheet

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

1 Image

Overview

<b>Product name</b>	Anti-LAIR1 antibody [NKTA255] (PerCP/Cy5.5®)
<b>Description</b>	Mouse monoclonal [NKTA255] to LAIR1 (PerCP/Cy5.5®)
<b>Host species</b>	Mouse
<b>Conjugation</b>	PerCP/Cy5.5®. Ex: 482nm, Em: 690nm
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Tissue, cells or virus corresponding to Human LAIR1. Activated NK cells and CD3- thymocytes.
<b>Positive control</b>	Flow Cytometry: Human peripheral blood.
<b>General notes</b>	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 GE Healthcare Limited.

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Store In the Dark.
<b>Storage buffer</b>	Preservative: 0.0975% Sodium azide Constituent: PBS
<b>Purity</b>	Size exclusion
<b>Purification notes</b>	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.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	NKTA255
<b>Isotype</b>	IgG1

Applications

Our [Abpromise guarantee](#) covers the use of **ab234263** in the following tested applications.

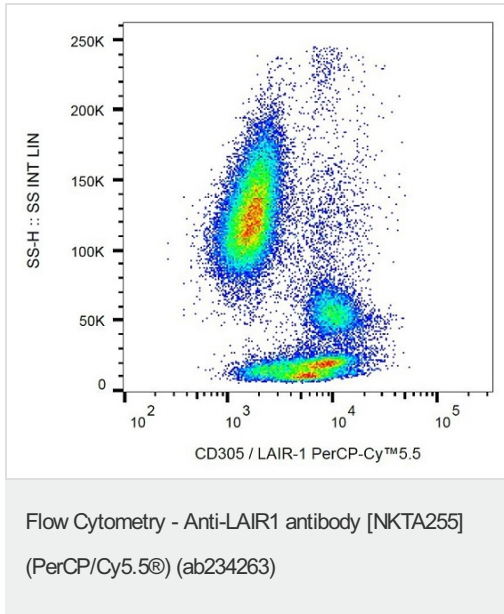
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use 4µl for 10 <sup>6</sup> cells. (or 100 µL whole blood)

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	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.
<b>Sequence similarities</b>	Contains 1 Ig-like C2-type (immunoglobulin-like) domain.
<b>Developmental stage</b>	Complete loss of expression when naive B-cells proliferates and differentiates into Ig-producing plasma cells under in vitro stimulation.
<b>Domain</b>	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.
<b>Post-translational modifications</b>	Phosphorylation at Tyr-251 and Tyr-281 activates it. May be phosphorylated by LCK. N-glycosylated.
<b>Cellular localization</b>	Cell membrane.

## Images



Flow cytometric analysis of surface stained human peripheral blood cells, labeling LAIR1 with ab234263 at 4  $\mu\text{L}$  per  $10^6$  cells. Lymphocyte gate.

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

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