abcam

Product datasheet

FITC Anti-LAIR1 antibody [NKTA255] ab27744

3 References 1 Image

Overview

Product name	FITC Anti-LAIR1 antibody [NKTA255]
Description	FITC Mouse monoclonal [NKTA255] to LAIR1
Host species	Mouse
Conjugation	FITC. Ex: 493nm, Em: 528nm
Tested applications	**Suitable for:** Flow Cyt
Species reactivity	**Reacts with:** Human
Immunogen	Tissue, cells or virus corresponding to Human LAIR1. NK cells lines B12.100 and AM.25 (Human)
General notes	Monoclonal antibodies of clone NKTA255, such as ab27744, are reported to inhibit NK cell triggering via CD16 molecules. 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: 7.40 Preservative: 0.09% Sodium azide Constituents: PBS, 1% BSA
Purity	Protein G purified
Primary antibody notes	Monoclonal antibodies of clone NKTA255, such as ab27744, are reported to inhibit NK cell triggering via CD16 molecules.
Clonality	Monoclonal
Clone number	NKTA255

Myeloma	P3U1
Isotype	IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab27744 in the following tested applications.

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

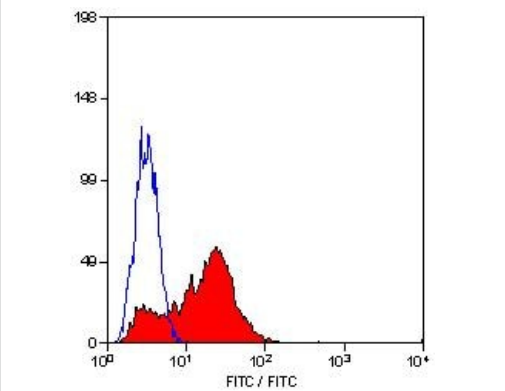
Application	Abreviews	Notes
Flow Cyt		Use 10µl for 10^6 cells. 10µl of neat antibody for 106 cells in 100µl.

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

Images



Flow Cytometry - FITC Anti-LAIR1 antibody [NKTA255] (ab27744)

Flow Cytometry analysis of human peripheral blood lymphocytes labeling LAIR1 with FITC-conjugated ab27744.

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