

ARG54288
anti-CD305 / LAIR1 antibody [NKTA255] (PE)

Package: 50 tests

Store at: 4°C

Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [NKTA255] recognizes CD305 / LAIR1
Tested Reactivity	Hu
Tested Application	FACS
Specificity	The clone NKTA255 recognizes CD305 / LAIR1, a 40 kDa type I transmembrane glycoprotein expressed on NK, T, and B cells, monocytes, dendritic cells, eosinophils, basophils, mast cells, CD34+ hematopoietic progenitor cells and thymocytes.
Host	Mouse
Clonality	Monoclonal
Clone	NKTA255
Isotype	IgG1
Target Name	CD305 / LAIR1
Immunogen	Activated NK cells and CD3- thymocytes
Conjugation	PE
Alternate Names	LAIR-1; hLAIR1; CD305; CD antigen CD305; Leukocyte-associated immunoglobulin-like receptor 1

Application Instructions

Application table	Application	Dilution
	FACS	10 µl antibody per 10 ⁶ cells or 10 µl antibody per 100 µl sample
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

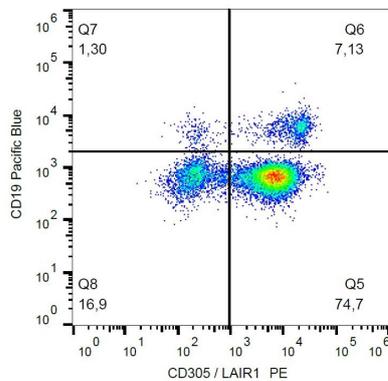
Properties

Form	Liquid
Purification Note	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Buffer	PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA
Preservative	15 mM Sodium azide
Stabilizer	0.2% (w/v) high-grade protease free BSA
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 3903 Human Swiss-port # Q6GTX8 Human
Gene Symbol	LAIR1
Gene Full Name	leukocyte-associated immunoglobulin-like receptor 1
Background	CD305, also known as LAIR1 (leukocyte-associated Ig-like receptor 1), is an inhibitory receptor found on many types of peripheral blood cells. It serves to suppress cell cytotoxicity, activation, proliferation, and differentiation regarding autoantigens via its two intracellular ITIM sites. CD305 belongs to the immunoglobulin superfamily and the leukocyte-associated inhibitory receptor family of proteins. It reacts with collagen ligands.
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, down-regulating 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. [UniProt]
Research Area	Immune System antibody
Calculated Mw	31 kDa
PTM	Phosphorylation at Tyr-251 and Tyr-281 activates it. May be phosphorylated by LCK. N-glycosylated.

Images



ARG54288 anti-CD305 / LAIR1 antibody [NKTA255] (PE) FACS image

Flow Cytometry: Human peripheral blood (lymphocyte gate) stained with ARG54288 anti-CD305 / LAIR1 antibody [NKTA255] (PE).