

ARG42326

# anti-CD305 / LAIR1 antibody [NKTA255] (APC)

Package: 50 tests Store at: 4°C

Summary	
Product Description	APC-conjugated Mouse Monoclonal antibody [NKTA255] recognizes CD305 / LAIR1
Tested Reactivity	Hu
Tested Application	FACS
Specificity	The mouse monoclonal antibody NKTA255 recognizes an extracellular epitope of 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	lgG1
Target Name	CD305 / LAIR1
Species	Human
Immunogen	Activated NK cells and CD3- thymocytes.
Conjugation	APC
Alternate Names	LAIR-1; hLAIR1; CD305; CD antigen CD305; Leukocyte-associated immunoglobulin-like receptor 1

### **Application Instructions**

Application table	Application	Dilution
	FACS	10 $\mu l$ / 100 $\mu l$ of whole blood or 10^6 cells
Application Note	* The dilutions indicate recomm should be determined by the sci	nended starting dilutions and the optimal dilutions or concentrations ientist.

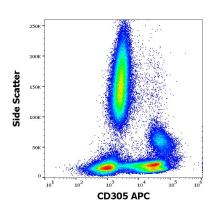
### Properties

Form	Liquid
Purification	Purified
Buffer	PBS and 15 mM Sodium azide.
Preservative	15 mM Sodium azide
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

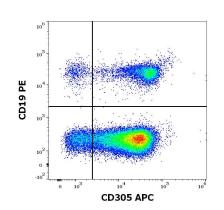
Gene Symbol	LAIR1
Gene Full Name	leukocyte-associated immunoglobulin-like receptor 1
Background	The protein encoded by this gene is an inhibitory receptor found on peripheral mononuclear cells, including natural killer cells, T cells, and B cells. Inhibitory receptors regulate the immune response to prevent lysis of cells recognized as self. The gene is a member of both the immunoglobulin superfamily and the leukocyte-associated inhibitory receptor family. The gene maps to a region of 19q13.4 called the leukocyte receptor cluster, which contains at least 29 genes encoding leukocyte-expressed receptors of the immunoglobulin superfamily. The encoded protein has been identified as an anchor for tyrosine phosphatase SHP-1, and may induce cell death in myeloid leukemias. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]
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]
Calculated Mw	31 kDa
PTM	Phosphorylation at Tyr-251 and Tyr-281 activates it. May be phosphorylated by LCK.
	N-glycosylated. [UniProt]
Cellular Localization	Cell membrane; Single-pass type I membrane protein. [UniProt]

#### Images



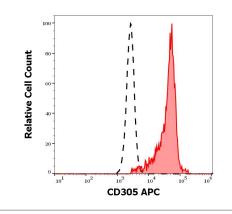
# ARG42326 anti-CD305 / LAIR1 antibody [NKTA255] (APC) FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG42326 anti-CD305 / LAIR1 antibody [NKTA255] (APC) at 10  $\mu$ l / 100  $\mu$ l of peripheral whole blood.



# ARG42326 anti-CD305 / LAIR1 antibody [NKTA255] (APC) FACS image

Flow Cytometry: Human lymphocytes stained with ARG42326 anti-CD305 / LAIR1 antibody [NKTA255] (APC) at 10  $\mu$ l / 100  $\mu$ l of peripheral whole blood and <u>ARG53783</u> anti-CD19 antibody [LT19] (PE) at 20  $\mu$ l / 100  $\mu$ l of peripheral whole blood.



## ARG42326 anti-CD305 / LAIR1 antibody [NKTA255] (APC) FACS image

Flow Cytometry: Separation of Human CD305 positive CD19 positive B cells (red-filled) from neutrophil granulocytes (black-dashed). Human peripheral whole blood stained with ARG42326 anti-CD305 / LAIR1 antibody [NKTA255] (APC) at 10  $\mu$ l / 100  $\mu$ l of peripheral whole blood.