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	IgG1
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 µl / 100 µl of whole blood or 10^6 cells

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

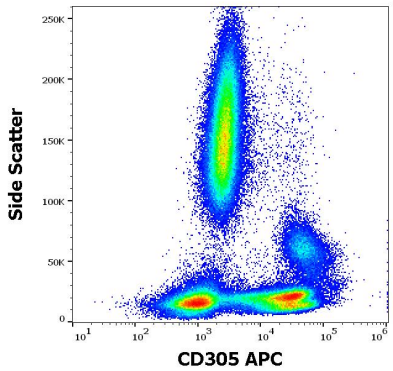
Properties

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

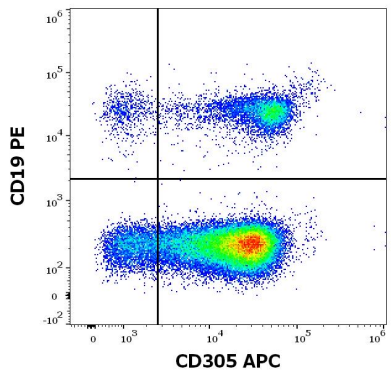
Gene Symbol	LAIR1
Gene Full Name	leukocyte-associated immunoglobulin-like receptor 1
Background	The protein encoded by this gene is an inhibitory receptor found on peripheral mononuclear cells, including natural killer cells, T cells, and B cells. Inhibitory receptors regulate the immune response to 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



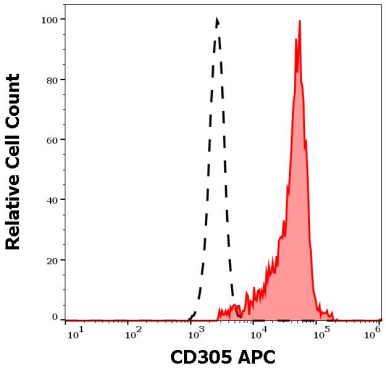
ARG42326 anti-CD305 / LAIR1 antibody [NKTA255] (APC) FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG42326 anti-CD305 / LAIR1 antibody [NKTA255] (APC) at 10 µl / 100 µl 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 µl / 100 µl of peripheral whole blood and ARG53783 anti-CD19 antibody [LT19] (PE) at 20 µl / 100 µl 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 µl / 100 µl of peripheral whole blood.