



1P-713-T100

Monoclonal Antibody to CD305 / LAIR1 Phycoerythrin (PE) conjugated (100 tests)

Clone:	NKTA255
Isotype:	Mouse IgG1
Specificity:	The mouse monoclonal antibody 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.
Regulatory Status:	RUO
Immunogen:	Activated NK cells and CD3- thymocytes
Species Reactivity:	Human
Preparation:	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.
Storage Buffer:	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
Storage / Stability:	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.
Expiration:	See vial label
Lot Number:	See vial label
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.

For laboratory research only, not for drug, diagnostic or other use.

**Antibodies****References:**

- *Poggi A, Pella N, Morelli L, Spada F, Revello V, Sivori S, Augugliaro R, Moretta L, Moretta A: p40, a novel surface molecule involved in the regulation of the non-major histocompatibility complex-restricted cytolytic activity in humans. *Eur J Immunol.* 1995 Feb;25(2):369-76.
- *Son M, Santiago-Schwarz F, Al-Abed Y, Diamond B: C1q limits dendritic cell differentiation and activation by engaging LAIR-1. *Proc Natl Acad Sci U S A.* 2012 Nov 13;109(46):E3160-7
- *Meyaard L: The inhibitory collagen receptor LAIR-1 (CD305). *J Leukoc Biol.* 2008 Apr;83(4):799-803.
- *Warren HS: The Eighth Human Leucocyte Differentiation Antigen (HLDA8) Workshop: natural killer cell section report. *Cell Immunol.* 2005 Jul-Aug;236(1-2):17-20.
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- *Poggi A, Tomasello E, Ferrero E, Zocchi MR, Moretta L: p40/LAIR-1 regulates the differentiation of peripheral blood precursors to dendritic cells induced by granulocyte-monocyte colony-stimulating factor. *Eur J Immunol.* 1998 Jul;28(7):2086-91.
- *Colombo BM, Canevali P, Magnani O, Rossi E, Puppo F, Zocchi MR, Poggi A: Defective expression and function of the leukocyte associated Ig-like receptor 1 in B lymphocytes from systemic lupus erythematosus patients. *PLoS One.* 2012;7(2):e31903

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