

T9-713-T100

## Monoclonal Antibody to CD305 / LAIR1 PerCP-Cy<sup>™</sup>5.5 conjugated (100 tests)

Clone: NKTA255

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

Isotype:

**Immunogen:** Activated NK cells and CD3- thymocytes

Mouse IqG1

Species Reactivity: Human

Preparation: The purified antibody is conjugated with tandem dye PerCP-Cy™5.5 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 4

μl reagent / 100 μl of whole blood or 10° cells in a suspension.

The content of a vial (0.4 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.



## PRODUCT DATA SHEET

## 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.

\*Poggi A, Tomasello E, Revello V, Nanni L, Costa P, Moretta L: p40 molecule regulates NK cell activation mediated by NK receptors for HLA class I antigens and TCR-mediated triggering of T lymphocytes. Int Immunol. 1997 Sep;9(9):1271-9.

\*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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