

1P-374-C025

## Monoclonal Antibody to NTAL / LAB Phycoerythrin (PE) conjugated (0.025 mg)

Clone: NAP-07

Isotype: Mouse IgG1

Specificity: The antibody NAP-07 reacts with Non-T cell activation linker (NTAL), also known

as LAB (linker of activated B cells), a 25 - 30 kDa transmembrane adaptor protein present in membrane microdomains (rafts) of B lymphocytes, NK cells and myeloid

cells.

Regulatory Status: RUO

Immunogen: Recombinant cytoplasmic domain (aa 91-243) of human NTAL.

**Species Reactivity:** Human, Mouse, Other not tested

**Preparation:** The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum

conditions. The conjugate is purified by size-exclusion chromatography.

Concentration: 0.1 mg/ml

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.

Suggested working dilution is 1:30. Indicated dilution is recommended starting

point for use of this product. Working concentrations should be determined by the

investigator.

**Expiration:** See vial label

**Lot Number:** See vial label

Background: NTAL (Non-T cell activation linker), also known as LAB (Linker for activation of B

cells), is a 30 kDa double-palmitoylated transmembrane adaptor protein expressed by B cells, NK cells, mast cells and macrophages. It is a negative regulator of early stages of BCR-dependent B cell signaling and serves as a negative regulator also in mast cells. However, in mast cells, NTAL also contributes to some activation

processes, partially overlapping with LAT function.



## PRODUCT DATA SHEET

## References:

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\*Brdicka T, Imrich M, Angelisova P, Brdickova N, Horvath O, Spicka J, Hilgert I, Luskova P, Draber P, Novak P, Engels N, Wienands J, Simeoni L, Osterreicher J, Aguado E, Malissen M, Schraven B, Horejsi V.: Non-T cell activation linker (NTAL): a transmembrane adaptor protein involved in immunoreceptor signaling. J Exp Med. 2002 Dec 16; 196(12):1617-26.

\*Tkaczyk C, Horejsi V, Iwaki S, Draber P, Samelson LE, Satterthwaite AB, Nahm DH, Metcalfe DD, Gilfillan AM.: NTAL phosphorylation is a pivotal link between the signaling cascades leading to human mast cell degranulation following Kit activation and Fc epsilon RI aggregation. Blood. 2004 Jul 1;104(1):207-14.

\*Volna P, Lebduska P, Draberova L, Simova S, Heneberg P, Boubelik M, Bugajev V, Malissen B, Wilson BS, Horejsi V, Malissen M, Draber P.: Negative regulation of mast cell signaling and function by the adaptor LAB/NTAL. J Exp Med. 2004 Oct 18;200(8):1001-13.

\*Lebduska P, Korb J, Tůmová M, Heneberg P, Dráber P: Topography of signaling molecules as detected by electron microscopy on plasma membrane sheets isolated from non-adherent mast cells. J Immunol Methods. 2007 Dec 1;328(1-2):139-51.

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