

TECHNICAL DATA SHEET

CyFlow™ NTAL (LAB) PE Anti-Hu/Ms; Clone NAP-07

REF AC648454

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	NTAL (LAB)
Alternative Names	—
Clone	NAP-07
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human Mouse
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [0.1 mg/ml]
Immunogen	Recombinant cytoplasmic domain (aa 91-243) of human NTAL

Specificity

The mouse monoclonal antibody NAP-07 recognizes Non-T cell activation linker (NTAL), also known as linker of activated B cells (LAB), a 25 - 30 kDa transmembrane adaptor protein present in membrane microdomains (rafts) of B lymphocytes, NK cells and myeloid cells.

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Application

The reagent is designed for Flow Cytometry analysis. Suggested working usage is 3.3 µg/ml. Indicated dilution is recommended starting point for use of this product, but working concentrations should be validated by the investigator.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

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.

References

- 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. < PMID: 12486104 >
- 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. < PMID: 15010370 >

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- 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. < PMID: 15477348 >
- 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. < PMID: 17900607 >
- Yamasaki S, Ishikawa E, Sakuma M, Kanagawa O, Cheng AM, Malissen B, Saito T: LAT and NTAL mediate immunoglobulin E-induced sustained extracellular signal-regulated kinase activation critical for mast cell survival. Mol Cell Biol. 2007 Jun; 27(12):4406-15. < PMID: 17420272 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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