

TECHNICAL DATA SHEET

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

REF BC100968

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	NTAL (LAB)
Alternative Names	—
Clone	NAP-07
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human Mouse
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [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

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation
- Western blot
- Immunocytochemistry

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH $\approx$ 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

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- 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 >
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- 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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