

11-374-C025

## Monoclonal Antibody to NTAL / LAB Purified Antibody (0.025 mg)

<b>Clone:</b>	NAP-07
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	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.
<b>Immunogen:</b>	Recombinant cytoplasmic domain (aa 91-243) of human NTAL.
<b>Species Reactivity:</b>	Human, Mouse, Other not tested
<b>Application:</b>	<b>Flow Cytometry</b> <i>Positive tissue:</i> RAJI human lymphoma cell line RAMOS human lymphoma cell line <b>Immunoprecipitation</b> <b>Western Blotting</b> <i>Recommended dilution:</i> 2 µg/ml, incubation 60 min <i>Positive control:</i> RAMOS human lymphoma cell line <i>Negative control:</i> HeLa human cervix carcinoma cell line <i>Sample preparation:</i> Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing SDS-PAGE sample buffer. <i>Application note:</i> Non-Reducing conditions. 12% separating SDS-PAGE gel. <b>Immunocytochemistry</b>
<b>Purity:</b>	> 95% (by SDS-PAGE)
<b>Purification:</b>	Purified from hybridoma culture supernatant by protein-A affinity chromatography.
<b>Concentration:</b>	1 mg/ml
<b>Storage Buffer:</b>	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
<b>Storage / Stability:</b>	Store at 2-8°C. Do not use after expiration date stamped on vial label. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	<b>NTAL</b> (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.

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



**Antibodies**

**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.
- \*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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