Datasheet for ABIN94440

anti-LAT2 antibody (Cytoplasmic Domain) (PE)

2 Images | 3 Publications

Go to Product page

Overview

Quantity:	0.1 mg
Target:	LAT2
Binding Specificity:	AA 91-243, Cytoplasmic Domain
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This LAT2 antibody is conjugated to PE
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	Recombinant cytoplasmic domain (aa 91-243) of human NTAL.
Clone:	NAP-07
Isotype:	IgG1
Specificity:	The antibody NAP-07 reacts with an intracellular epitope of Non-T cell activation linker (NTAL), also known as LAB (linker of activated B cells), a 25 - 30 kDa transmembrane adaptor protein associating with lipid raft components in the plasma membrane of B lymphocytes, NK cells and myeloid cells.
Cross-Reactivity (Details):	Mouse, Human, Other not tested
Purification:	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	LAT2
Alternative Name:	NTAL / LAB (LAT2 Products)
Background:	Linker for activation of T cells family member 2,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.,LAB, LAT2
Gene ID:	56743
UniProt:	Q9JHL0
Pathways:	Fc-epsilon Receptor Signaling Pathway, BCR Signaling

Application Details

Application Notes:	Flow cytometry: Intracellular staining, recommended dilution: 1-5 µg/mL, positive tissue: RAJI human lymphoma cell line, RAMOS human lymphoma cell line.
Comment:	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
Restrictions:	For Research Use only

Handling

Concentration:	0.1 mg/mL
Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	**Do not freeze.** Avoid prolonged exposure to light.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Publications

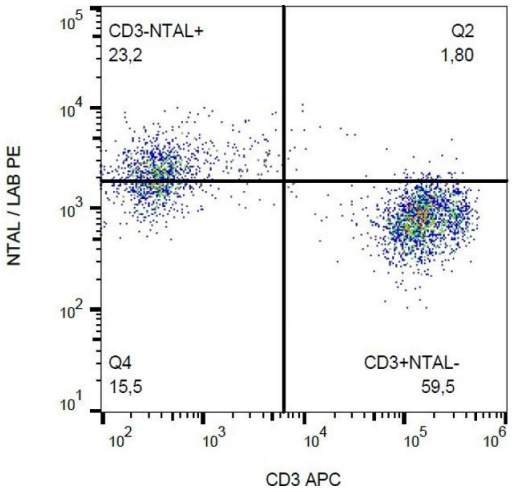
Product cited in:

Tkaczyk, Horejsi, Iwaki, Draber, Samelson, Satterthwaite, Nahm, Metcalfe, Gilfillan: "NTAL phosphorylation is a pivotal link between the signaling cascades leading to human mast cell degranulation following Kit activation and Fc epsilon RI aggregation." in: **Blood**, Vol. 104, Issue 1 , pp. 207-14, (2004) (PubMed).

Volná, Lebduska, Dráberová, Símová, Heneberg, Boubelík, Bugajev, Malissen, Wilson, Horejsí, Malissen, Dráber: "Negative regulation of mast cell signaling and function by the adaptor LAB/NTAL." in: **The Journal of experimental medicine**, Vol. 200, Issue 8, pp. 1001-13, (2004) (PubMed).

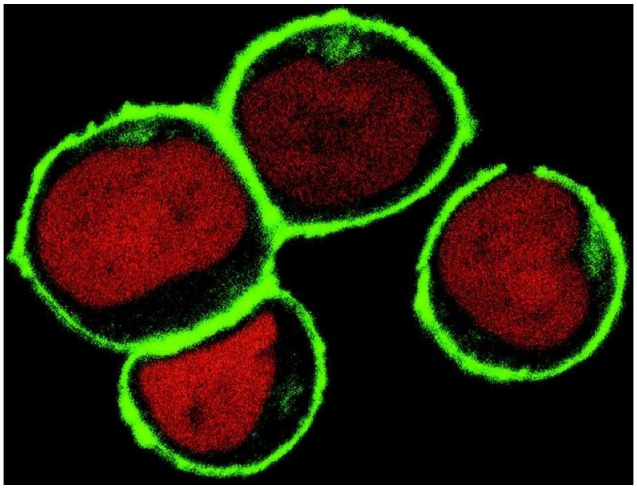
Brdicka, Imrich, Angelisová, Brdicková, Horváth, Spicka, Hilgert, Lusková, Dráber, Novák, Engels, Wienands, Simeoni, Osterreicher, Aguado, Malissen, Schraven, Horejsí: "Non-T cell activation linker (NTAL): a transmembrane adaptor protein involved in immunoreceptor signaling." in: **The Journal of experimental medicine**, Vol. 196, Issue 12, pp. 1617-26, (2002) (PubMed).

Images



Flow Cytometry

Image 1. Flow cytometry analysis (intracellular staining) of NTAL in human peripheral blood lymphocytes using anti-NTAL (NAP-07) PE.



Confocal Microscopy

Image 2. Confocal microscopy Subcellular localization of NTAL by confocal microscopy in THP-1 human acute monocytic leukemia cell line. THP-1 cells were permeabilized and immunostained using anti-NTAL (NAP-07 ; green). Nuclei are vizualized by propidium iodide (red).

