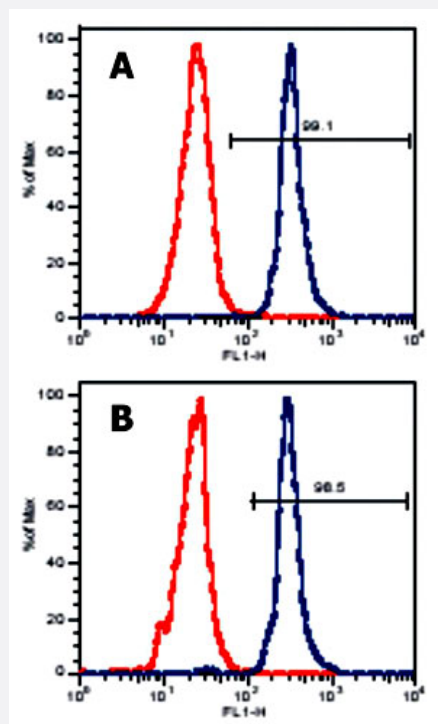


LAT monoclonal antibody, clone LAT-01

Catalog # MAB3865 Size 100 ug

Applications



Flow Cytometry

Flow Cytometry analysis of LAT expression in human peripheral blood lymphocytes (PBL) using LAT monoclonal antibody, clone LAT-01 (Cat # MAB3865) (surface markers were stained prior to intracellular staining of human LAT).

Panel A : gate on CD4+ cells.

Panel B : gate on CD8+ cells.

Specification

Product Description	Mouse monoclonal antibody raised against partial recombinant LAT.
Immunogen	Recombinant protein corresponding to cytoplasmic region of human LAT.
Host	Mouse
Theoretical MW (kDa)	36-38
Reactivity	Human
Specificity	This antibody reacts with Linker for activation of T cells (LAT), a 36-38 KDa transmembrane adaptor protein expressed by T cells, pre-B cells, NK cells, mast cells and platelets.

Form	Liquid
Isotype	IgG1
Recommend Usage	Western Blot (1-2 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (0.09% sodium azide)
Storage Instruction	Store at 4°C. Do not freeze. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot
- Immunoprecipitation
- Flow Cytometry

Flow Cytometry analysis of LAT expression in human peripheral blood lymphocytes (PBL) using LAT monoclonal antibody, clone LAT-01 (Cat # MAB3865) (surface markers were stained prior to intracellular staining of human LAT).

Panel A : gate on CD4+ cells.

Panel B : gate on CD8+ cells.

Gene Info — LAT

Entrez GeneID	27040
Gene Name	LAT
Gene Alias	LAT1, pp36
Gene Description	linker for activation of T cells
Omim ID	602354
Gene Ontology	Hyperlink

Gene Summary

The protein encoded by this gene is phosphorylated by ZAP-70/Syk protein tyrosine kinases following activation of the T-cell antigen receptor (TCR) signal transduction pathway. This transmembrane protein localizes to lipid rafts and acts as a docking site for SH2 domain-containing proteins. Upon phosphorylation, this protein recruits multiple adaptor proteins and downstream signaling molecules into multimolecular signaling complexes located near the site of TCR engagement. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq]

Other Designations

36 kDa phospho-tyrosine adaptor protein

Publication Reference

- [LAT and NTAL mediate immunoglobulin E-induced sustained extracellular signal-regulated kinase activation critical for mast cell survival.](#)

Yamasaki S, Ishikawa E, Sakuma M, Kanagawa O, Cheng AM, Malissen B, Saito T.

Molecular and Cellular Biology 2007 Jun; 27(12):4406.

- [Transmembrane adaptor molecules: a new category of lymphoid-cell markers.](#)

Tedoldi S, Paterson JC, Hansmann ML, Natkunam Y, Rudiger T, Angelisova P, Du MQ, Robertson H, Roncador G, Sanchez L, Pozzobon M, Masir N, Barry R, Pileri S, Mason DY, Marafioti T, Horejsi V.

Blood 2005 Sep; 107(1):213.

Application: IHC-P, Human, Rat, Human normal and neoplastic lymphoid tissue, Rat appendix, plasma cells, thymus, tonsil

- [Right time, right place: the organization of membrane proximal signaling.](#)

Simeoni L, Smida M, Posevitz V, Schraven B, Lindquist JA.

Seminars in Immunology 2005 Feb; 17(1):35.

Pathway

- [Fc epsilon RI signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Natural killer cell mediated cytotoxicity](#)
- [T cell receptor signaling pathway](#)