

Product datasheet for **SM3119P**

LAT Mouse Monoclonal Antibody [Clone ID: LAT-01]

Product data:

Product Type:	Primary Antibodies
Clone Name:	LAT-01
Applications:	FC, IP, WB
Recommended Dilution:	Immunoprecipitation: Tyrosine-phosphorylated form of LAT is not optimally recognized. Flow cytometry: Recommended dilution: 1-4 µg/ml, intracellular staining. Tyrosine-phosphorylated form of LAT is not optimally recognized. Western blotting: Recommended dilution: 1-2 µg/ml.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Bacterially produced recombinant polypeptide corresponding to the entire cytoplasmic domain of human LAT
Specificity:	The 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.
Formulation:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4 State: Purified State: Liquid Ig fraction
Concentration:	lot specific
Purification:	Protein A affinity chromatography; purity: > 95 % (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store the antibody at 2 - 8 °C up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	linker for activation of T-cells
Database Link:	Entrez Gene 27040 Human O43561



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Background:

LAT (Linker for Activation of T cells) is a 36-38 kDa double-palmitoylated transmembrane adaptor protein expressed by T cells, pre-B cells, NK cells, mast cells and platelets. After immunoreceptor triggering, LAT becomes multiply tyrosine-phosphorylated by Syk-, Src-, or Tec-family kinases, providing docking sites for downstream signaling molecules. LAT is essential for TCR-dependent T cell- and FcεRI-dependent mast cell activation, as well as for maturation of early thymocytes. It is also involved in NK cell signaling and platelet activation.

Synonyms:

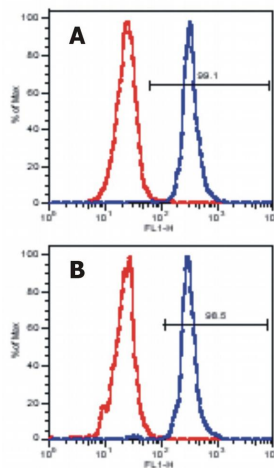
pp36, p36-38

Protein Families:

Druggable Genome, Transmembrane

Protein Pathways:

Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Natural killer cell mediated cytotoxicity, T cell receptor signaling pathway

Product images:

Flow Cytometry analysis of LAT expression in peripheral blood lymphocytes using anti-human LAT (LAT-01) (surface markers were stained prior to intracellular staining of human LAT). Panel A: gate on CD4+ cells Panel B: gate on CD8+ cells