

TECHNICAL DATA SHEET

CyFlow™ LAT Purified Anti-Hu; Clone LAT-01

REF CN406062

For Research Use Only.
Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	LAT
Alternative Names	—
Clone	LAT-01
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	Mouse
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Bacterially produced recombinant polypeptide corresponding to the entire cytoplasmic domain of human LAT

Contact Information:

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Specificity

The mouse monoclonal antibody LAT-01 recognizes LAT (Linker for activation of T cells) antigen, a 36-38 kDa transmembrane adaptor protein expressed by T cells, pre-B cells, NK cells, mast cells and platelets.

Application

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

- Flow cytometry
- Immunoprecipitation
- Western blot

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

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 Fc ϵ RI-dependent mast cell activation, as well as for maturation of early thymocytes. It is also involved in NK cell signaling and platelet activation.

References

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- Simeoni L, Smida M, Posevitz V, Schraven B, Lindquist JA: Right time, right place: the organization of membrane proximal signaling. Semin Immunol. 2005 Feb; 17(1):35-49. < PMID: 15582487 >

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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 >
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The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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