

Purified anti-LAT

Catalog # / Size: 623901 / 25 µg
623902 / 100 µg

Clone: LAT1111

Isotype: Mouse IgG1

Immunogen: Partial recombinant protein (cytoplasmic domain of human LAT)

Reactivity: Human (does not cross-react with mouse)

Preparation: The antibody was purified by affinity chromatography.

Formulation: This LAT antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide. Final antibody concentration is 0.5 mg/ml.

Concentration: 0.5 mg/ml

Storage: Upon receipt, store at 4°C.

Applications:

Applications: WB- *Quality tested*
IP - *Reported in the literature*

Recommended Usage: Each lot of this LAT antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 5 µg antibody per 5 ml antibody dilution buffer for each mini-gel. It is recommended that the reagent be titrated for optimal performance for each application.

Description: LAT (linker for activation of T-cells) is a 36 kD phospho-tyrosine adaptor protein containing SH2 domains and a CVRC motif. Two LAT isoforms have been reported with approximate molecular weights of 36 kD and 38 kD. LAT is localized to lipid rafts, and is also a potential type III transmembrane protein, thought to be expressed in the juxtannuclear intracellular compartment. LAT links TCR engagement to Ras-MAPK activation, Ca²⁺ flux, IL-2 expression and is required for T-cell development. LAT is phosphorylated when activated by TCR cross-linking, where it recruits signaling molecules. LAT activation can be prevented by polyunsaturated fatty acids. LAT is modified by ZAP-70 and Syk phosphorylation and can also be palmitoylated. LAT has been reported to be associated with Grb2, Gads, Grap, PLC-γ1, p85 subunit PI3K, ZAP-70, Syk, Itk, Vav, SLP-76, and cbl. The LAT1111 monoclonal antibody recognizes the cytoplasmic domain of human LAT and has been shown to be useful for Western blotting and immunoprecipitation. The LAT1111 antibody does not cross-react with mouse LAT.

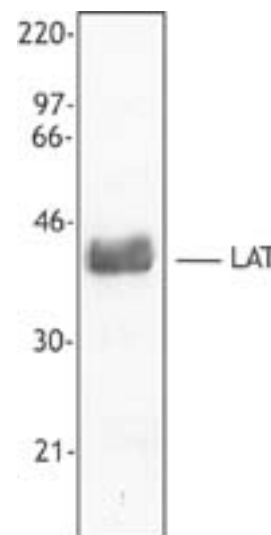
Antigen References: 1. Zhang W, *et al.* 1998. *Cell*. 92:83.
2. Zeyda M, *et al.* 2002. *J. Biol. Chem.* 277:28418.
3. Perez-Villar J, *et al.* 2002 *Biochemistry*. 41:10732.
4. Hartgroves L, *et al.* 2003 *J. Biol. Chem.* 278:20389.

Related Products:

Product
Purified anti-human CD3
Purified anti-human CD3
HRP Goat anti-mouse IgG (minimal x-reactivity)
Purified anti-SLP-76

Clone
HIT3a
UCHT1
Poly4053
H76

Application
FC, IHC, IP
FC, IHC, IP, WB, CyTOF®
ELISA, IHC, WB
WB, IP, FC



Whole cell extract from human peripheral blood mononuclear cells was resolved by electrophoresis, transferred to nitrocellulose and probed with monoclonal anti-LAT antibody. Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and a chemiluminescence system.



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.



*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.