

# Product datasheet

info@arigobio.com

# ARG66637 anti-LAT phospho (Tyr200) antibody

Package: 100 μg Store at: -20°C

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes LAT phospho (Tyr200)

Tested Reactivity Hu, Ms
Tested Application IHC-P, WB

Specificity Isoform 1: Phosphorylated at Tyr200.

Isoform 2: Phosphorylated at Tyr191.

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name LAT

Species Human

Immunogen Phosphospecific peptide around Tyr200 of Human LAT.

Conjugation Un-conjugated

Alternate Names Linker for activation of T-cells family member 1; 36 kDa phospho-tyrosine adapter protein; pp36; LAT1;

p36-38

#### **Application Instructions**

Application table	Application	Dilution
	IHC-P	1:100 - 1:300
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	28 kDa	

### **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol and 0.5% BSA

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

#### Bioinformation

Gene Symbol

LAT

Gene Full Name

linker for activation of T cells

Background

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, Jul 2008]

**Function** 

Required for TCR (T-cell antigen receptor)- and pre-TCR-mediated signaling, both in mature T-cells and during their development. Involved in FCGR3 (low affinity immunoglobulin gamma Fc region receptor III)-mediated signaling in natural killer cells and FCER1 (high affinity immunoglobulin epsilon receptor)-mediated signaling in mast cells. Couples activation of these receptors and their associated kinases with distal intracellular events such as mobilization of intracellular calcium stores, PKC activation, MAPK activation or cytoskeletal reorganization through the recruitment of PLCG1, GRB2, GRAP2, and other signaling molecules. [UniProt]

Calculated Mw

28 kDa

PTM

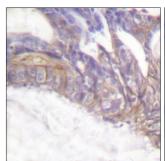
Phosphorylated on tyrosines by ZAP70 upon TCR activation, or by SYK upon other immunoreceptor activation; which leads to the recruitment of multiple signaling molecules. Is one of the most prominently tyrosine-phosphorylated proteins detected following TCR engagement. May be dephosphorylated by PTPRJ. Phosphorylated by ITK leading to the recruitment of VAV1 to LAT-containing complexes.

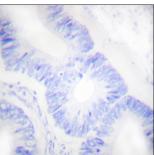
Palmitoylation of Cys-26 and Cys-29 is required for raft targeting and efficient phosphorylation. [UniProt]

Cellular Localization

Cell membrane; Single-pass type III membrane protein. Note=Present in lipid rafts. [UniProt]

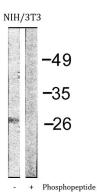
#### **Images**





#### ARG66637 anti-LAT phospho (Tyr200) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human colon carcinoma tissue stained with ARG66637 anti-LAT phospho (Tyr200) antibody. The picture on the right is blocked with the phospho peptide.



## ARG66637 anti-LAT phospho (Tyr200) antibody WB image

Western blot: NIH/3T3 cell lysate stained with ARG66637 anti-LAT phospho (Tyr200) antibody. The lane on the right is blocked with the phosphopeptide.