

## **LAT Polyclonal Antibody**

Catalog No: YT2539

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC

Target: LAT

Fields: >>Ras signaling pathway;>>Rap1 signaling pathway;>>NF-kappa B signaling

pathway;>>Natural killer cell mediated cytotoxicity;>>Th1 and Th2 cell differentiation;>>Th17 cell differentiation;>>T cell receptor signaling pathway;>>Fc epsilon RI signaling pathway;>>Fc gamma R-mediated

phagocytosis;>>Yersinia infection;>>PD-L1 expression and PD-1 checkpoint

pathway in cancer

Gene Name: LAT

**Protein Name:** Linker for activation of T-cells family member 1

O43561

O54957

Human Gene Id: 27040

**Human Swiss Prot** 

No:

Mouse Gene Id: 16797

**Mouse Swiss Prot** 

No:

Rat Gene Id: 81511

Rat Swiss Prot No: 070601

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

LAT. AA range:191-240

**Specificity:** LAT Polyclonal Antibody detects endogenous levels of LAT protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.



Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500-2000;IHC 1:50-300

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 28kD

Cell Pathway: Natural killer cell mediated cytotoxicity; T\_Cell\_Receptor; Fc epsilon RI; Fc

gamma R-mediated phagocytosis;

**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:** 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.,miscellaneous:Engagement of killer inhibitory receptors (KIR) disrupts the interaction of PLCG1 with LAT and blocks target cell-induced

activation of PLC, maybe by inducing the dephosphorylation of

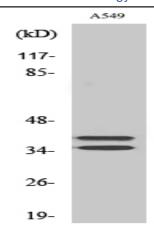
LAT.,PTM:Palmitoylation of Cys-26 and Cys-29 is required

Subcellular Location : Cell membrane ; Single-pass type III membrane protein . Present in lipid rafts.

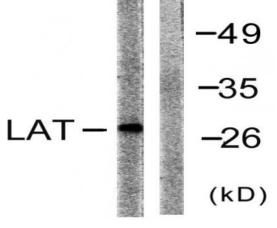
**Expression:** Expressed in thymus, T-cells, NK cells, mast cells and, at lower levels, in spleen.

Present in T-cells but not B-cells (at protein level).

## **Products Images**



Western Blot analysis of various cells using LAT Polyclonal Antibody diluted at 1:500



Western blot analysis of lysates from NIH/3T3 cells, using LAT Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human oophoroma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).