



LAT (phospho Tyr191) Polyclonal Antibody

Catalog No	YP-Ab-13850
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	LAT
Immunogen	The antiserum was produced against synthesized peptide derived from human LAT around the phosphorylation site of Tyr191. AA range:191-240
Specificity	Phospho-LAT (Y191) Polyclonal Antibody detects endogenous levels of LAT protein only when phosphorylated at Y191.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	36 kDa phospho tyrosine adapter protein;36 kDa phospho-tyrosine adapter protein;36 kDa phospho-tyrosine adaptor protein;LAT 1;lat;LAT_HUMAN;LAT1; Linker for activation of T cells;Linker for activation of T cells family member 1; transmembrane adaptor;Linker for activation of T-cells family member 1;p36 38; p36-38;pp36
Observed Band	28kD
Calculated Molecular Weight	28kD
Cell Pathway	Cell membrane ; Single-pass type III membrane protein . Present in lipid rafts.
Tissue Specificity	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).
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. 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

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],

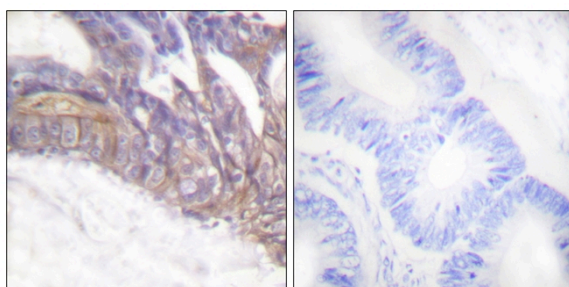
matters needing attention

Avoid repeated freezing and thawing!

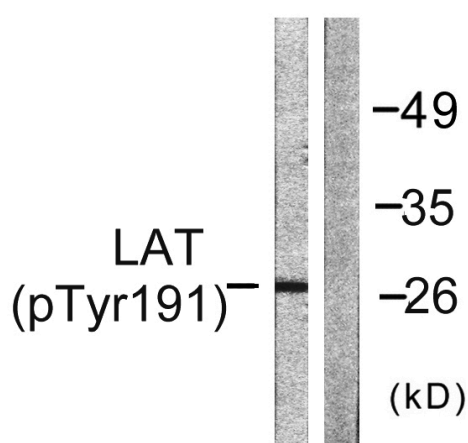
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using LAT (Phospho-Tyr191) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from NIH/3T3 cells, using LAT (Phospho-Tyr191) Antibody. The lane on the right is blocked with the phospho peptide.