

# LAT (Phospho Tyr200) Rabbit pAb

CatalogNo: YP0327 Orthogonal Validated 💽

## Key Features

Host Species <ul> <li>Rabbit</li> </ul>	Reactivity <ul> <li>Human,Mouse,Rat</li> </ul>	Applications <ul> <li>WB,IHC</li> </ul>
MW • 34kD (Observed)	Isotype • IgG	

#### **Recommended Dilution Ratios**

WB 1:500-2000 IHC 1:50-300

## **Storage**

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

## **Basic Information**

Clonality Polyclonal

## Immunogen Information

**Immunogen** The antiserum was produced against synthesized peptide derived from human LAT around the phosphorylation site of Tyr171. AA range:171-220

**Specificity** Phospho-LAT (Y200) Polyclonal Antibody detects endogenous levels of LAT protein only when phosphorylated at Y200. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):DDyVN

## **Target Information**

Gene name	LAT			
Protein Name	Linker for activation of T-cells family member 1			
	Organism	Gene ID	UniProt ID	
	Human	<u>27040;</u>	<u>043561;</u>	
	Mouse	<u>16797;</u>	<u>054957;</u>	
	Rat	<u>81511;</u>	<u>070601;</u>	

# Cellular

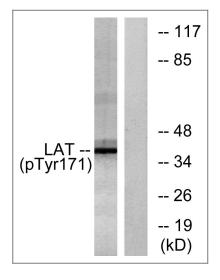
Cell membrane ; Single-pass type III membrane protein . Present in lipid rafts.

#### Localization

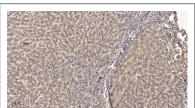
Tissue specificity Expressed in thymus, T-cells, NK cells, mast cells and, at lower levels, in spleen. Present in T-cells but not B-cells (at protein level).

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., 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 for raft targeting and efficient phosphorylation.,PTM:Phosphorylated on tyrosines by ZAP-70 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., subcellular location:Present in lipid rafts., subunit:When phosphorylated, interacts directly with the PIK3R1 subunit of phosphoinositide 3-kinase and the SH2 domains of GRB2, GRAP, GRAP2, PLCG1 and PLCG2. Interacts indirectly with CBL, SOS, VAV, and LCP2. Interacts with SHB, SKAP2 and CLNK (By similarity). Interacts with FCGR1A., 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).,

## Validation Data



Western blot analysis of lysates from Jurkat cells treated with UV 15', using LAT (Phospho-Tyr171) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human liver cancer. 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).

#### **Contact information**

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Please scan the QR code to access additional product information: LAT (Phospho Tyr200) Rabbit pAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents