



# LAT (Phospho Tyr255) rabbit pAb

Cat No.:ES20193

For research use only

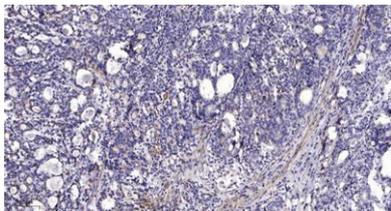
## Overview

<b>Product Name</b>	LAT (Phospho Tyr255) rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;ELISA;IHC
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	WB 1:500-2000;IHC-p 1:50-300; ELISA 2000-20000
<b>Immunogen</b>	Synthesized peptide derived from human LAT (Phospho Tyr255)
<b>Specificity</b>	This antibody detects endogenous levels of Human,Mouse,Rat LAT (Phospho Tyr255)
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	LAT (Phospho Tyr255)
<b>Gene Name</b>	LAT
<b>Cellular localization</b>	Cell membrane ; Single-pass type III membrane protein . Present in lipid rafts.
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	38kD
<b>Human Gene ID</b>	27040
<b>Human Swiss-Prot Number</b>	O43561
<b>Alternative Names</b>	Linker for activation of T-cells family member 1 (36 kDa phospho-tyrosine adapter protein;pp36;p36-38)
<b>Background</b>	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. Palmitoylation of Cys-26 and Cys-29 is required for raft targeting and efficient phosphorylation. 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. Present in lipid rafts. 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. 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).



Immunohistochemical analysis of paraffin-embedded human Gastric adenocarcinoma. 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).

