

LAT (Phospho Tyr255) rabbit pAb

Catalog No: YP1611

Reactivity: Human; Mouse; Rat

Applications: WB;ELISA;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: LAT (Phospho Tyr255)

O43561

O54957

Human Gene Id: 27040

Human Swiss Prot

No:

Mouse Gene Id: 16797

Mouse Swiss Prot

No:

Rat Gene ld: 81511

Rat Swiss Prot No: 070601

Immunogen: Synthesized peptide derived from human LAT (Phospho Tyr255)

Specificity: This antibody detects endogenous levels of Human, Mouse, Rat LAT (Phospho

Tyr255)

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; ELISA 2000-20000

Purification: The antibody was affinity-purified from rabbit serum by affinity-chromatography

using specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 38kD

Background: 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).,

Function: cell activation, immune effector process, cell activation during immune

response, myeloid leukocyte activation, myeloid cell activation during immune response, leukocyte activation during immune response, leukocyte mediated

immunity, myeloid leukocyte mediated immunity, mast cell mediated

immunity, regulation of leukocyte activation, exocytosis,immune response, cell surface receptor linked signal transduction, integrin-mediated signaling pathway, intracellular signaling cascade, small GTPase mediated signal transduction, Ras protein signal transduction, vesicle-mediated transport, calcium-

mediated signaling, second-messenger-mediated signaling, secretion by cell, leukocyte degranulation, mast cell degranulation, regulated secretory

pathway, leukocyte activation, mast cell activation, secretion, regulation of T cell

2/3



activation, regulation of cell activation, regulation of lymphocyte activat

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).

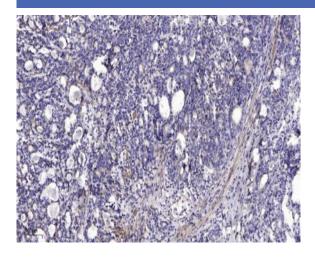
Sort : 9124

No4: 1

Host: Rabbit

Modifications: Phospho

Products Images



Immunohistochemical analysis of paraffin-embedded human Gastric adenocarcinoma. 1, Antibody was diluted at $1:200(4^{\circ} \text{ overnight})$. 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).