Anti-Phospho-LAT (Tyr 220) Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R014552

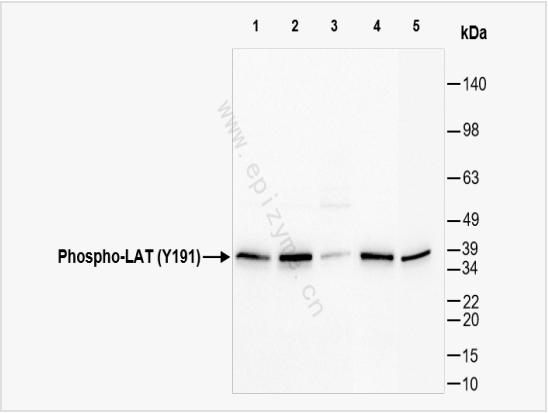
Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	12J17C68
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Phospho-LAT (Y220)
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Phospho-LAT (Tyr 220) Rabbit mAb [12J17C68] is for research use only and not for use in diagnostic or therapeutic procedures.

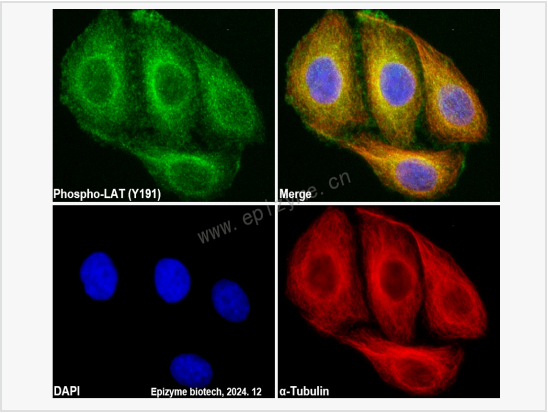
Protein Information

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, linker for activation of T cells, transmembrane adaptor, Linker for activation of T-cells family member 1, p36 38, p36-38, pp36.
Calculated MW	Calculated MW: 28 kDa; Observed MW: 38 kDa
Uniprot ID	O43561
Gene ID	27040
Background	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.
Cellular Location	Cell membrane. Present in lipid rafts.
Tissue Location	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).

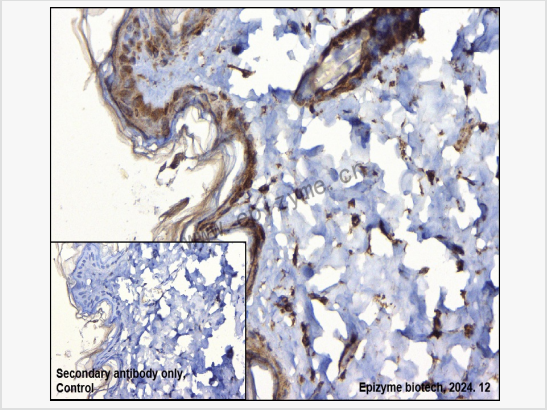
Validation Images



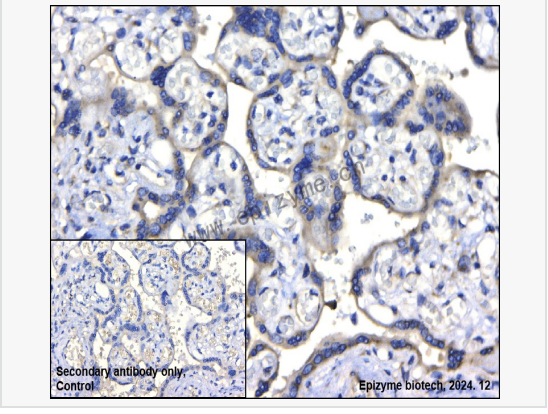
Western Blot - Anti-Phospho-LAT (Tyr220) Rabbit mAb [12J17C68]
All lanes: R014552 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lane 4: Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates
Lane 5: Rat kidney whole tissue lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 28 kDa
Observed band size: 38 kDa
Developed using the ECL technique (Cat. No. SQ201).



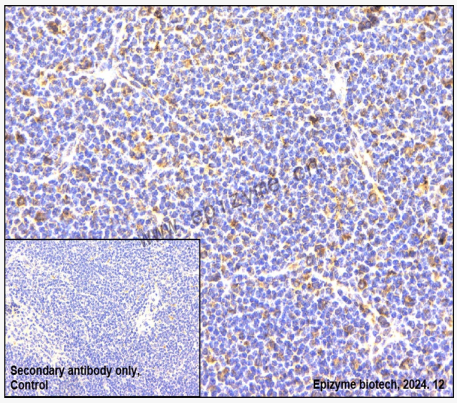
Immunofluorescence - Anti-Phospho-LAT (Tyr220) Rabbit mAb [12J17C68]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R014552 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-Phospho-LAT (Tyr220) Rabbit mAb [12J17C68]
Sample: Paraformaldehyde-fixed, paraffin embedded rat skin tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014552 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-Phospho-LAT (Tyr220) Rabbit mAb [12J17C68]
Sample: Paraformaldehyde-fixed, paraffin embedded human placenta tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014552 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-Phospho-LAT (Tyr220) Rabbit mAb [12J17C68]
Sample: Paraformaldehyde-fixed, paraffin embedded mouse spleen tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R014552 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.