

## [KD Validated] Anti-LAT Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

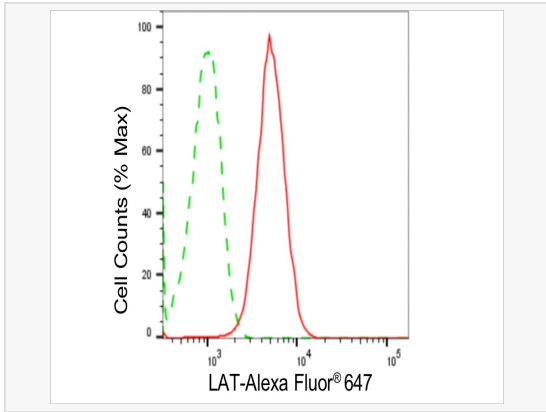
Catalog # R020807

### Product Information

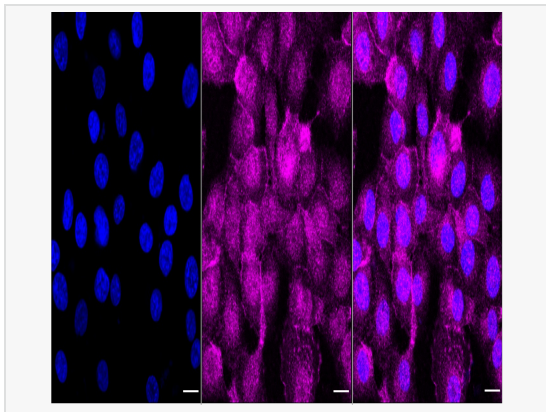
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	50R44L59
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human LAT
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-LAT Rabbit mAb [50R44L59] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

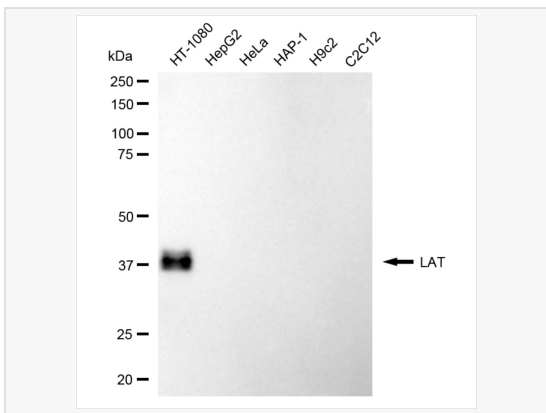
Synonyms	LAT; Linker For Activation Of T Cells; LAT1; Linker For Activation Of T Cells, Transmembrane Adaptor; Linker For Activation Of T-Cells Family Member 1; 36 KDa Phosphotyrosine Adapter Protein; P36-38; Pp36; 36 KDa Phospho-Tyrosine Adapter Protein; 36 KDa Phospho-Tyrosine Adaptor Protein; IMD52.
Calculated MW	Calculated MW: 28 kDa, Observed MW: 36 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.



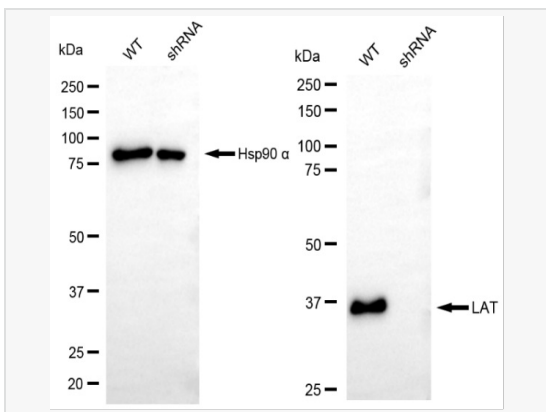
Flow cytometric analysis of LAT expression in HT-1080 cells using LAT antibody (R020807, 1:2,000). Green, isotype control; red, LAT.



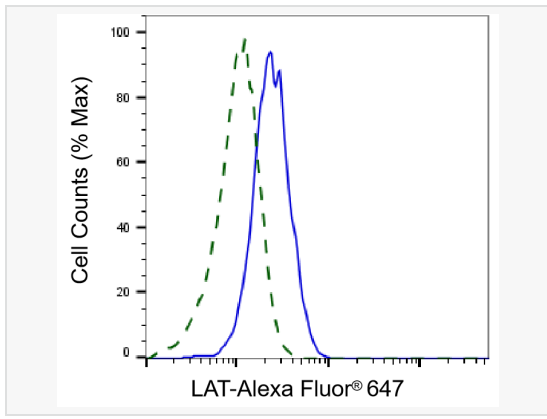
Immunocytochemical staining of HT-1080 cells with LAT antibody(R020807, 1:1,000) . Nuclei were stained blue with DAPI; LAT was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20  $\mu$ m.



Western blotting analysis using LAT antibody (R020807). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with LAT antibody (R020807, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit. LAT, linker for activation of T cells.



Western blotting analysis using LAT antibody (R020807). LAT expression in wild type (WT) and LAT shRNA knockdown (KD) HT-1080 cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with LAT antibody (R020807, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Validation of LAT knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with LAT antibody (R020807, 1:2,000) and analyzed using BD flow cytometer.