

Rabbit anti-Human LAT Polyclonal Antibody | anti-LAT antibody

Anti-LAT Antibody Picoband

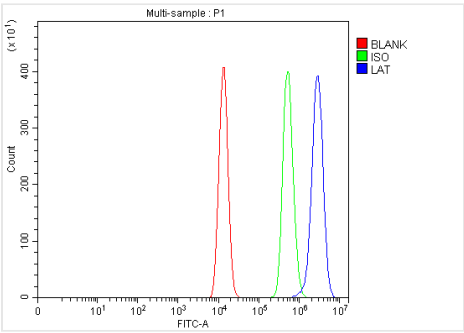
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127076	Rabbit	Human	Flow Cytometry, Functional Assay, Western Blot, ELISA

PRODUCT SYNONYMS

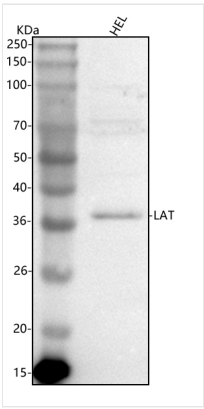
LAT; Polyclonal Antibody; Anti-LAT Antibody Picoband; Serine/threonine-protein kinase AtPK1/AtPK6; 70 kDa ribosomal protein S6 kinase 1 antibody; KS6B1_HUMAN antibody; p70 alpha antibody; P70 beta 1 antibody; p70 ribosomal S6 kinase alpha antibody; p70 ribosomal S6 kinase beta 1 antibody; p70 S6 kinase alpha antibody; P70 S6 Kinase antibody; p70 S6 kinase alpha 1 antibody; p70 S6 kinase alpha 2 antibody; p70 S6K antibody; p70 S6K-alpha antibody; p70 S6KA antibody; p70(S6K) alpha antibody; p70(S6K)-alpha antibody; p70-alpha antibody; p70-S6K 1 antibody; p70-S6K antibody; P70S6K antibody; P70S6K1 antibody; p70S6Kb antibody; PS6K antibody; Ribosomal protein S6 kinase 70kDa polypeptide 1 antibody; Ribosomal protein S6 kinase beta 1 antibody; Ribosomal protein S6 kinase beta-1 antibody; Ribosomal protein S6 kinase I antibody; RPS6KB1 antibody; S6K antibody; S6K-beta-1 antibody; S6K1 antibody; Serine/threonine kinase 14 alpha antibody; Serine/threonine-protein kinase 14A antibody; STK14A antibody; anti-LAT antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	IgG
Specificity	Expressed in all tissues.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Applicable Applications for anti-LAT antibody	FCM/FACS (Flow Cytometry), WB (Western Blot), ELISA
Immunogen	E coli-derived human LAT recombinant protein (Position: H28-E235). Human LAT shares 61% and 59.3% amino acid (aa) sequence identity with mouse and rat LAT, respectively.
Subcellular Localization	Cytoplasm, Nucleus
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross reactivity with other proteins.
Protein Function	Downstream effector of TOR signaling pathway involved in osmotic stress response. Could be involved in the control of plant growth and development. Phosphorylates the ribosomal proteins P14, P16 and S6. Functions as a repressor of cell proliferation and required for maintenance of chromosome stability and ploidy levels through the RBR1-E2F pathway.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)
Figure 2. Flow Cytometry analysis of HEL cells using anti-LAT antibody (AAA127076). Overlay histogram showing HEL cells stained with AAA127076 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-LAT Antibody (AAA127076, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)
Figure 1. Western blot analysis of LAT using anti-LAT antibody (AAA127076). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HEL whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-LAT antigen affinity purified polyclonal antibody (#AAA127076) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for LAT at approximately 37 kDa. The expected band size for LAT is at 28 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-LAT antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-LAT antibody	Primary Antibodies; Signal Transduction; Signaling Pathway; Small G Proteins
References	1. Aguado, E., Richelme, S., Nunez-Cruz, S., Miazek, A., Mura, A.-M., Richelme, M., Guo, X.-J., Sainty, D., He, H.-T., Malissen, B., Malissen, M. Induction of T helper type 2 immunity by a point mutation in the LAT adaptor. Science 296: 2036-2040, 2002. 2. Bacchelli, C., Moretti, F. A., Carmo, M., Adams, S., Stanescu, H. C., Pearce, K., Madhakar, M., Gilmour, K. C., Nicholas, A. K., Woods, C. G., Kleta, R., Beales, P. L., Qasim, W., Gaspar, H. B. Mutations in linker for activation of T cells (LAT) lead to a novel form of severe combined immunodeficiency. J. Allergy Clin. Immun. 139: 634-642, 2017.3. Hundt, M., Tabata, H., Jeon, M.-S., Hayashi, K., Tanaka, Y., Krishna, R., De Giorgio, L., Liu, Y.-C., Fukata, M., Altman, A. Impaired activation and localization of LAT in anergic T cells as a consequence of a selective palmitoylation defect. Immunity 24: 513-522, 2006.

NCBI AND UNIPROT INFORMATION

NCBI GI #	62739155
NCBI GeneID	27040
NCBI Accession #	NP_001014987.1
NCBI GenBank Nucleotide #	NM_001014987.1
UniProt Accession #	O43561; O43919
Molecular Weight	27,930 Da
NCBI Official Full Name	linker for activation of T-cells family member 1 isoform b
NCBI Official Synonym Full Names	linker for activation of T cells

NCBI Official Symbol	LAT
NCBI Official Synonym Symbols	LAT1; pp36
NCBI Protein Information	linker for activation of T-cells family member 1; p36-38; 36 kDa phospho-tyrosine adapter protein; 36 kDa phospho-tyrosine adaptor protein; linker for activation of T cells, transmembrane adaptor
UniProt Protein Name	Linker for activation of T-cells family member 1
UniProt Gene Name	LAT
UniProt Synonym Gene Names	pp36
UniProt Entry Name	LAT_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/lat-antibody-flow-cytometry-western-blot-elisa/127076>