

Rabbit anti-Mouse, Rat Lat Polyclonal Antibody | anti-Lat antibody

Anti-Lat Antibody Picoband

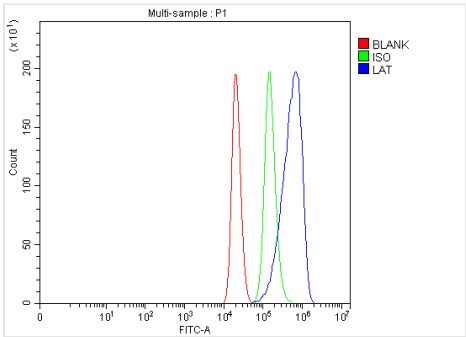
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19756	Rabbit	Mouse, Rat	Western Blot, Immunohistochemistry, Flow Cytometry, Functional Assay, ELISA

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

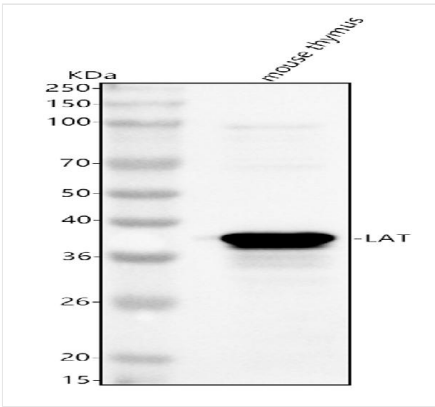
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat
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	WB (Western Blot), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry), ELISA
Application Notes	WB: 0.1-0.25ug/ml, Mouse IHC: 2-5ug/ml, Mouse, Rat FC/FACS (Fixed): 1-3ug/1x10 ⁶ cells, Mouse ELISA: 0.1-0.5ug/ml
Immunogen	E coli-derived mouse Lat recombinant protein (Position: R29-E217). Mouse Lat shares 68.4% and 93.1% amino acid (aa) sequence identity with human 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 (Flow Cytometry)

Figure 10. Flow Cytometry analysis of Raw264.7 cells using anti-Lat antibody (AAA19756).Overlay histogram showing Raw264.7 cells stained with AAA19756 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-Lat Antibody (AAA19756, 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.



IHC (Immunohistochemistry)

Figure 9. IHC analysis of Lat using anti-Lat antibody (AAA19756).Lat was detected in a paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Lat Antibody (AAA19756) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Lat Antibody (AAA19756) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Lat Antibody (AAA19756) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Lat Antibody (AAA19756) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Lat Antibody (AAA19756) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Lat Antibody (AAA19756) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Lat Antibody (AAA19756) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Lat Antibody (AAA19756) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (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 (#AAA19756) at 0.25ug/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 38 kDa. The expected band size for Lat is at 26 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 #	6754510
NCBI GeneID	16797
NCBI Accession #	NP_034819.1
NCBI GenBank Nucleotide #	NM_010689.3
UniProt Accession #	O54957
Molecular Weight	26,015 Da
NCBI Official Full Name	linker for activation of T-cells family member 1
NCBI Official Synonym Full Names	linker for activation of T cells
NCBI Official Symbol	Lat
NCBI Official Synonym Symbols	pp36; p36-38
NCBI Protein Information	linker for activation of T-cells family member 1
UniProt Protein Name	Linker for activation of T-cells family member 1
UniProt Gene Name	Lat
UniProt Synonym Gene Names	pp36

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://www.aaabiotech.com/polyclonal/lat-antibody-western-blot-immunohistochemistry-flow-cytometry-elisa/19756>