

Anti-LAT Antibody
Catalog # ABO11472**Specification**

Anti-LAT Antibody - Product Information

Application	IHC, WB
Primary Accession	O43561
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Linker for activation of T-cells family member 1(LAT) detection. Tested with WB, IHC-P, ICC in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-LAT Antibody - Additional Information

Gene ID 27040

Other Names

Linker for activation of T-cells family member 1, 36 kDa phospho-tyrosine adapter protein, pp36, p36-38, LAT

Calculated MW

27930 MW KDa

Application Details

Immunocytochemistry , 0.5-1 µg/ml, Human, -
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Cell membrane ; Single-pass type III membrane protein . Present in lipid rafts.

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). .

Protein Name

Linker for activation of T-cells family member 1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human LAT(242-262aa QEAEVEEEEGAPDYENLQELN), different from the related mouse and rat sequences by six amino

acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-LAT Antibody - Protein Information**Name** LAT**Function**

Required for TCR (T-cell antigen receptor)- and pre-TCR- mediated signaling, both in mature T-cells and during their development (PubMed:25907557, PubMed:23514740). 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; Single-pass type III membrane protein. Note=Present in lipid rafts

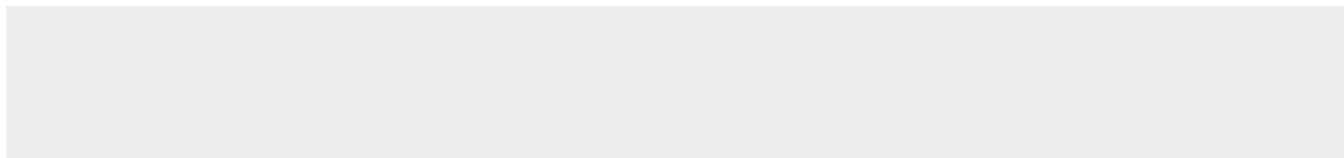
Tissue Location

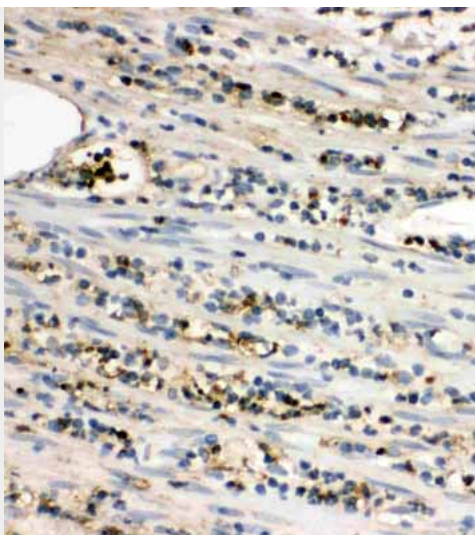
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Anti-LAT Antibody - Protocols

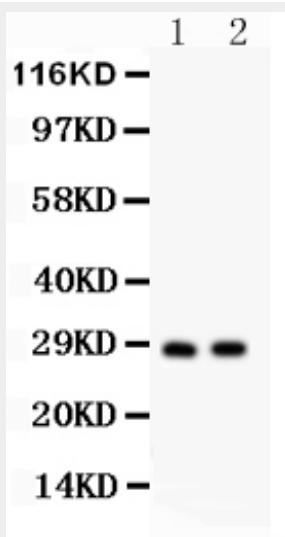
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-LAT Antibody - Images



Anti-LAT antibody, ABO11472, IHC(P)IHC(P): Human Appendicitis Tissue



Anti-LAT antibody, ABO11472, Western blottingAll lanes: Anti LAT (ABO11472) at 0.5ug/mlLane 1: Human Placenta Tissue Lysate at 50ugLane 2: U937 Whole Cell Lysate at 40ugPredicted bind size: 28KDObserved bind size: 28KD

Anti-LAT Antibody - Background

Linker for activation of T cells, also known as LAT, is a protein which in humans is encoded by the LAT gene. This gene is mapped to 16p11.2. The protein encoded by this gene is phosphorylated by ZAP-70/Syk protein tyrosine kinases following activation of the T-cell antigen receptor(TCR) signal transduction pathway. This transmembrane protein localizes to lipid rafts and acts as a docking site for SH2 domain-containing proteins. Upon phosphorylation, this protein recruits multiple adaptor proteins and downstream signaling molecules into multimolecular signaling complexes located near the site of TCR engagement.