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LAT Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP9432b

Specification

LAT Antibody (C-term) Blocking Peptide - Product Information

Primary Accession O43561

LAT Antibody (C-term) Blocking Peptide - 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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

LAT Antibody (C-term) Blocking Peptide - 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
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).

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LAT Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

LAT Antibody (C-term) Blocking Peptide - Images

LAT Antibody (C-term) Blocking Peptide - Background

LAT 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.

LAT Antibody (C-term) Blocking Peptide - References

Cruz-Orcutt, N., et al. Mol. Immunol. 46 (11-12), 2274-2283 (2009) Saito, A., et al. J. Hum. Genet. 54(6):317-323(2009)Shen, S., et al. J. Immunol. 182(9):5596-5604(2009)Krishnan, S., et al. J. Immunol. 181(11):8145-8152(2008)Jiang, Y., et al. Leuk. Res. 31(4):541-545(2007)