

**Goat Anti-LAT1 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1616a****Specification**

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**Goat Anti-LAT1 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">O43561</a>
Other Accession	<a href="#">NP_001014988</a> , <a href="#">27040</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Goat</b>
Clonality	<b>Polyclonal</b>
Concentration	<b>100ug/200ul</b>
Isotype	<b>IgG</b>
Calculated MW	<b>27930</b>

**Goat Anti-LAT1 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

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-LAT1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-LAT1 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:<a href="http://www.uniprot.org/citations/25907557" target="\_blank">25907557</a>, PubMed:<a href="http://www.uniprot.org/citations/23514740" target="\_blank">23514740</a>). 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).

### Goat Anti-LAT1 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](#)

### Goat Anti-LAT1 Antibody - Images



AF1616a (0.01 µg/ml) staining of peripheral blood mononucleocytes lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### Goat Anti-LAT1 Antibody - Background

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. Alternative splicing results in multiple transcript variants encoding different isoforms.

### Goat Anti-LAT1 Antibody - References

New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al.

Genes Immun, 2010 Apr. PMID 20237496.

Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.

PI3 kinase function is vital for the function but not formation of LAT-mediated signaling complexes. Cruz-Orcutt N, et al. Mol Immunol, 2009 Jul. PMID 19427038.

The essential role of LAT in thymocyte development during transition from the double-positive to single-positive stage. Shen S, et al. J Immunol, 2009 May 1. PMID 19380807.

Association study between single-nucleotide polymorphisms in 199 drug-related genes and commonly measured quantitative traits of 752 healthy Japanese subjects. Saito A, et al. J Hum Genet, 2009 Jun. PMID 19343046.