


Product datasheet

Anti-LAT (phospho Y191) antibody ab59197

3 References 2 Images

Overview

Product name	Anti-LAT (phospho Y191) antibody
Description	Rabbit polyclonal to LAT (phospho Y191)
Host species	Rabbit
Specificity	Detects endogenous levels of LAT only when phosphorylated at tyrosine 191. This antibody detects LAT phosphorylated on Tyrosine 191 in isoform 2 (SwissProt: O43561-2), and Tyrosine 220 in isoform 1 (SwissProt: O43561).
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat 
Immunogen	Synthetic phosphopeptide from around the phosphorylation site of tyrosine 191 (REY ^P VN) of human LAT

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride Without Mg+2 and Ca+2
Purity	Immunogen affinity purified
Purification notes	Affinity purified from rabbit antiserum by affinity chromatography using epitope specific phosphopeptide. The antibody against non phosphopeptide was removed by chromatography using non phosphopeptide corresponding to the phosphorylation site.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab59197** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/1000. Detects a band of approximately 28 kDa (predicted molecular weight: 28 kDa).
IHC-P		Use at an assay dependent concentration.

Target

Function

Required for TCR (T-cell antigen receptor)- and pre-TCR-mediated signaling, both in mature T-cells and during their development. 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.

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).

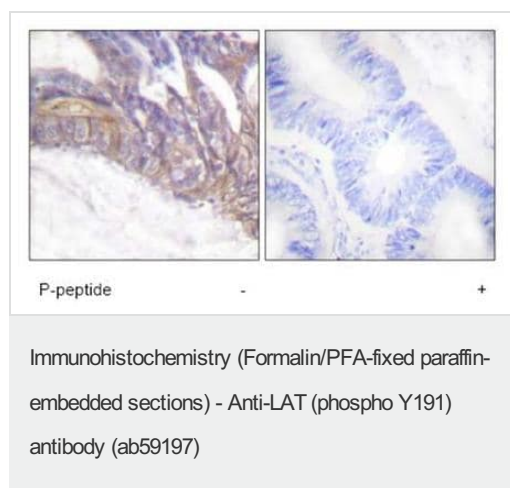
Post-translational modifications

Phosphorylated on tyrosines by ZAP-70 upon TCR activation, or by SYK upon other immunoreceptor activation; which leads to the recruitment of multiple signaling molecules. Is one of the most prominently tyrosine-phosphorylated proteins detected following TCR engagement. May be dephosphorylated by PTPRJ. Palmitoylation of Cys-26 and Cys-29 is required for raft targeting and efficient phosphorylation.

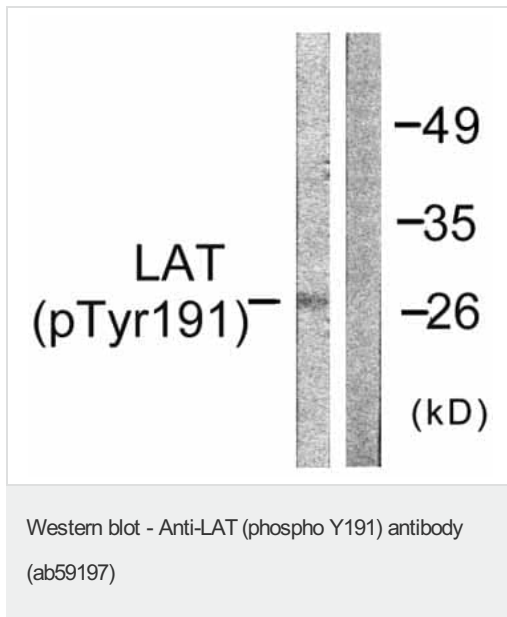
Cellular localization

Cell membrane. Present in lipid rafts.

Images



Immunohistochemical analysis of paraffin embedded human colon carcinoma tissue using ab59197 at 1/50 dilution. Left: untreated. Right: sample treated with immunising peptide.



All lanes : Anti-LAT (phospho Y191) antibody (ab59197) at 1/500 dilution

Lane 1 : NIH3T3 cells treated with PMA

Lane 2 : NIH3T3 cells treated with PMA with phosphopeptide

Predicted band size: 28 kDa

Observed band size: 28 kDa

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