

Phospho-LAT (Y220) Antibody

Rabbit mAb Catalog # AP90121

Product Information

| Application | WB, IHC, IF, ICC, IP, IHF |
|-------------------|--|
| Primary Accession | <u>043561</u> |
| Reactivity | Rat, Human, Mouse |
| Clonality | Monoclonal |
| Other Names | 36 kDa phospho-tyrosine adaptor protein; LAT1; lat; pp36 |
| lsotype | Rabbit IgG |
| Host | Rabbit |
| Calculated MW | 27930 |

Additional Information

| Dilution Purification Immunogen Description | WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:30 Affinity-chromatography A synthesized peptide derived from human Phospho-LAT (Y220) 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 molecular |
|--|--|
| Storage Condition and Buffer | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

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:<u>23514740</u>, PubMed:<u>25907557</u>). 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). |

Images



Western blot analysis of Phospho-LAT (Y220) in Jurkat cell treated with CD3 lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.