For Research Use Only

Phospho-LCK (Tyr505) Recombinant antibody

Catalog Number:85679-1-RR



Purification Method:

Basic Information

Catalog Number: GenBank Accession Number:

85679-1-RR BC013200 Protein A purification GeneID (NCBI): CloneNo.:

100ul , Concentration: 1000 $\mu g/ml$ by 3932 242450G6

Nanodrop: **UNIPROT ID:** Recommended Dilutions: Source: P06239 WB 1:5000-1:50000

Rabbit Full Name:

Isotype: lymphocyte-specific protein tyrosine

IgG kinase

> 539 aa, 56 kDa Observed MW: 56 kDa

Calculated MW:

Applications

Tested Applications: WB, ELISA

Species Specificity:

human

Positive Controls:

WB: H2O2 treated Jurkat cells,

Background Information

Lck is comprised of a SH3 domain, binding prolinerich regions, a SH2 domain, binding tyrosine-phosphorylated sequences, a kinase domain, a unique domain, and the negative regulatory tail. The kinase domain of Lck contains 2 important tyrosine residues. Tyr394 and Tyr505 represent the activating and inhibitory tyrosine residue, respectively. Therefore, Lck can exist in 4 distinct states of activity: an inactive state, a primed state, an active state, and a dually phosphorylated active state. Transitions between activity states are governed by phosphorylation at the Tyr394 and Tyr505 residues. When Tyr394 is dephosphorylated while Tyr505 is phosphorylated, Lck is in an $in active \ state. \ Lck \ becomes \ primed \ when \ Tyr 505 \ is \ dephosphory lated \ and \ fully \ active \ after \ Tyr 394 \ phosphory lation.$ In addition, there is a dually phosphorylated active form of Lck when both Tyr394 and Tyr505 residues are phosphorylated. (PMID: 32794043)

Storage

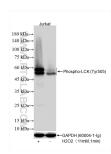
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

Selected Validation Data



Non-treated Jurkat cells and H2O2 treated Jurkat cells were subjected to SDS PAGE followed by western blot with 85679-1-RR (Phospho-LCK (Tyr505) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH (60004-1-Ig) antibody as a loading control.