For Research Use Only

## Phospho-LCK (Tyr505) Recombinant antibody, PBS Only

Catalog Number:85679-1-PBS



**Basic Information** 

Catalog Number:

GenBank Accession Number:

**Purification Method:** 

85679-1-PBS

GeneID (NCBI):

BC013200

Protein A purification

100ug, Concentration: 1 mg/ml by

CloneNo.: 242450G6

Nanodrop: Source:

**UNIPROT ID:** P06239

Rabbit

Full Name:

Isotype: lymphocyte-specific protein tyrosine IgG

kinase

Calculated MW: 539 aa. 56 kDa Observed MW: 56 kDa

**Applications** 

**Tested Applications:** 

WB, Indirect ELISA

**Species Specificity:** 

## **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

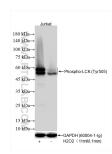
Storage:

Store at -80°C.

Storage Buffer:

PBS only, pH7.3

## 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. This data was developed using the same antibody clone with 85679-1-PBS in a different storage buffer formulation.