

## Product datasheet for AP02429PU-S

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## LCK pTyr394 Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

Applications: WE

Recommended Dilution: Western Blot: 1/500-1/1000.

Incubate membrane with diluted antibody in 5% nonfat milk, 1xTBS, 0.1% Tween-20 at 4°C

with gentle shaking, overnight.

Reactivity: Human, Mouse

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Peptide sequence around the phosphorylation site of Tyrosine 394 (N-EpY-T-A) derived from

Human Lck.

**Specificity:** This antibody detects endogenous levels of Lck only when phosphorylated at Tyrosine 394.

Formulation: PBS (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol.

State: Aff - Purified

State: Liquid purified Ig fraction.

**Concentration:** lot specific

**Purification:** Immunoaffinity chromatography using epitope-specific phosphopeptide. The antibody

against non-phosphopeptide was removed by chromatography using non-phosphopeptide

corresponding to the phosphorylation site.

Conjugation: Unconjugated

Storage: Store the antibody (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: One year from despatch.

**Gene Name:** LCK proto-oncogene, Src family tyrosine kinase

**Database Link:** Entrez Gene 3932 Human

P06239





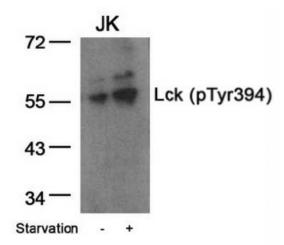
Background:

Lck is a lymphoid specific cytosolic protein tyrosine kinase (PTK), which is essential for T cell development and function. It is constitutively associated with the cytoplasmic portions of the CD4 and CD8 surface receptors and plays a key role in T cell antigen receptor (TCR) linked signal transduction pathways. Association of the TCR with a peptide antigen bound MHC complex facilitates the interaction of CD4 and CD8 with MHC class II and class I molecules, respectively, and thereby recruits the associated Lck to the vicinity of the TCR/CD3 complex. Lck then phosphorylates tyrosine residues within the immunoreceptor tyrosine based activation motifs (ITAMs) in the cytoplasmic tails of the TCR chains and CD3 subunits. The phosphoITAMs serve as docking sites for Src homology domain 2 (SH2) containing molecules, predominantly ZAP 70 and Syk. Only then can ZAP 70 undergo tyrosine phosphorylation, become enzymatically active and further phosphorylate downstream effector molecules. In addition, Lck contributes to signaling by other receptor molecules. Lck is expressed at all stages of thymocyte development and is required for the regulation of maturation events that are governed by both pre-TCR and mature TCR.

**Synonyms:** p56-LCK, LSK

Note: Molecular Weight: 56 kDa

## **Product images:**



Western blot analysis of extracts from JK cells untreated or treated with starvation using Lck (Phospho-Tyr394) Antibody