

## Product datasheet for **TA323287**

### LCK Rabbit Polyclonal Antibody

#### Product data:

|                         |   |
|-------------------------|---|
| Product Type:           | Primary Antibodies  |
| Applications:           | WB  |
| Recommended Dilution:   | WB: 1:500-1000  |
| Reactivity:             | Human, Mouse  |
| Modifications:          | Phospho-specific  |
| Host:                   | Rabbit  |
| Isotype:                | IgG   |
| Clonality:              | Polyclonal  |
| Immunogen:              | Peptide sequence around phosphorylation site of tyrosine 505 (G-Q-Y(p)-Q-P) derived from Human Lck.                                   |
| Formulation:            | PBS pH7.3, 0.05% NaN <sub>3</sub> , 50% glycerol  |
| Concentration:          | lot specific  |
| Purification:           | Antigen affinity purification   |
| Conjugation:            | Unconjugated  |
| Storage:                | Store at -20°C as received.   |
| Stability:              | Stable for 12 months from date of receipt.  |
| Predicted Protein Size: | 58 kDa  |
| Gene Name:              | LCK proto-oncogene, Src family tyrosine kinase  |
| Database Link:          | <a href="#">NP_005347</a><br><a href="#">Entrez Gene 16818 Mouse</a> <a href="#">Entrez Gene 3932 Human</a><br><a href="#">P06239</a> |



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**Background:**

Tyrosine kinase that plays an essential role for the selection and maturation of developing T-cell in the thymus and in mature T-cell function. 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 tyrosines residues within the immunoreceptor tyrosines-based activation motifs (ITAMs) in the cytoplasmic tails of the TCRgamma chains and CD3 subunits, initiating the TCR/CD3 signaling pathway. In addition, contributes to signaling by other receptor molecules. Associates directly with the cytoplasmic tail of CD2, and upon engagement of the CD2 molecule, LCK undergoes hyperphosphorylation and activation. Also plays a role in the IL2 receptor-linked signaling pathway that controls T-cell proliferative response. Binding of IL2 to its receptor results in increased activity of 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 alpha beta TCR.

**Synonyms:**

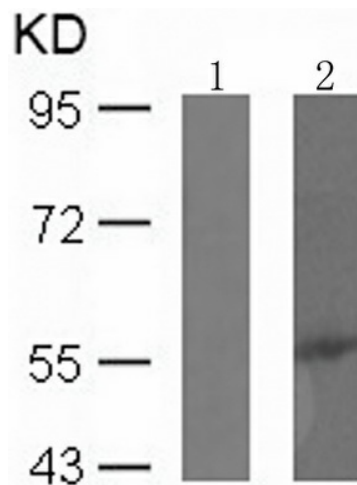
IMD22; LSK; p56lck; pp58lck; YT16

**Protein Families:**

Druggable Genome, Protein Kinase, Stem cell - Pluripotency

**Protein Pathways:**

Natural killer cell mediated cytotoxicity, Primary immunodeficiency, T cell receptor signaling pathway

**Product images:**

Predicted band size: 58 kDa. Positive control: Jurkat cell lysate. Recommended dilution: 1/ 500-1000. (Gel: 10%SDS-PAGE Lane 1: Treated with the peptide Lane 2: Jurkat cells lysate Lysates: 30 ug per lane Primary antibody: 1/500 dilution Secondary antibody: Goat anti Rabbit IgG - H&L (HRP) at 1/10000 dilution Exposure time: 1 minute)