abcam

Product datasheet

Recombinant human Lck protein ab79626

3 图像

描述

产品名称
重组人Lck蛋白

生物活性 Specific Activity: 1.96 pmol/min/μg.

纯**度** > 90 % SDS-PAGE.

Affinity purified.

表达系统 Baculovirus infected Sf9 cells

蛋白长度 Full length protein

无动物成分 No

性质 Recombinant

种属 Human

标签 GST tag N-Terminus

技术指标

Our Abpromise guarantee covers the use of ab79626 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应**用** Western blot

Functional Studies

SDS-PAGE

形式 Liquid

制备和贮存

稳定性和存储 Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.0462% (R*,R*)-1,4-Dimercaptobutan-2,3-diol, 0.395% Tris HCl, 0.05% Tween,

30% Glycerol (glycerin, glycerine), 0.58% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

常规信息

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功能

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. Phosphorylates RUNX3.

组织特异性

Expressed specifically in lymphoid cells.

疾病相关

Note=A chromosomal aberration involving LCK is found in leukemias. Translocation t(1;7)

(p34;q34) with TCRB.

序列相似性

Belongs to the protein kinase superfamily. Tyr protein kinase family. SRC subfamily.

Contains 1 protein kinase domain.

Contains 1 SH2 domain. Contains 1 SH3 domain.

结构域

The SH2 domain mediates interaction with SQSTM1. Interaction is regulated by Ser-59

phosphorylation.

翻译后修饰

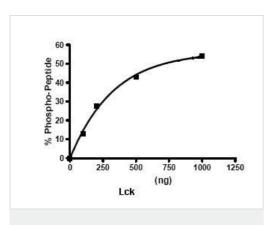
Phosphorylated on Tyr-394, which increases enzymatic activity (By similarity). Phosphorylated on

Tyr-505, which decreases activity.

细胞定位

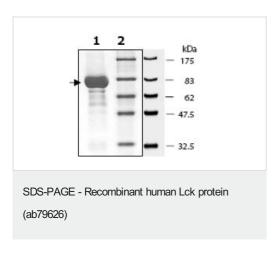
Cytoplasm. Cell membrane. Present in lipid rafts in an unactive form.

图片

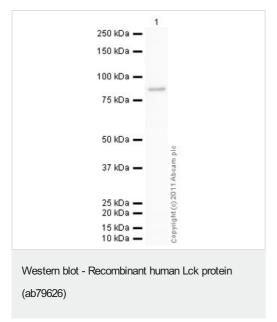


Functional Studies - Recombinant human Lck protein (ab79626)

Kinase Assay - Specific activity 1.96 pmol/min/µg.



SDS-PAGE showing ab79626 at approximately 84kDa (3µg).



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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