


Anti-Lck (phospho Y504) antibody ab4901

5 References [画像数 1](#)

製品の概要

製品名	Anti-Lck (phospho Y504) antibody
製品の詳細	Rabbit polyclonal to Lck (phospho Y504)
由来種	Rabbit
特異性	Hck [pY522] (75% homology), and Lyn [pY508] (83.3% homology) have not been tested.
アプリケーション	適用あり: WB
種交差性	交差種: Recombinant fragment 交差が予測される動物種: Mouse, Chicken 
免疫原	Synthetic peptide corresponding to Human Lck (phospho Y504). The sequence is conserved in human and mouse. Amino acid number is based on the mature sequence without the initiator methionine. Database link: P06239 (Peptide available as ab5217)
ポジティブ・コントロール	Full length untagged recombinant human Lck protein.
特記事項	<p>Lck (p56lck), a member of the Src family of non-receptor tyrosine protein kinases, is expressed predominantly in T cells. Lck function is critical both for T cell development in the thymus and activation of mature T cells in the periphery by antigen. The activity of Lck is regulated by phosphorylation of two conserved tyrosine residues, Tyr-505 (equivalent to Tyr-529 in c-Src) and Tyr-394 (equivalent to Tyr-418 in c-Src). Tyr-505 is located near the carboxyl terminus of Lck and, when phosphorylated, associates intramolecularly with the SH2 domain in the amino-terminal half of the protein. This helps stabilise Lck in a conformation that, biologically, is relatively inactive. In the absence of phosphorylation at Tyr-505, intramolecular binding of the carboxyl terminus to the SH2 domain does not occur, and Lck exhibits increased activity in vivo.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
バッファー	pH: 7.3 Preservative: 0.05% Sodium azide Constituents: PBS, 0.1% BSA
精製度	BSA is IgG and protease free Immunogen affinity purified
特記事項 (精製)	Purified from rabbit serum by sequential epitope-specific chromatography. The antibody has been negatively preadsorbed using (i) a non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated Lck, and (ii) a generic tyrosine phosphorylated peptide to remove antibody that is reactive with phospho-tyrosine (irrespective of the sequence). The final product is generated by affinity chromatography using a Lck-derived peptide that is phosphorylated at tyrosine 505.
一次抗体 備考	Lck (p56lck), a member of the Src family of non-receptor tyrosine protein kinases, is expressed predominantly in T cells. Lck function is critical both for T cell development in the thymus and activation of mature T cells in the periphery by antigen. The activity of Lck is regulated by phosphorylation of two conserved tyrosine residues, Tyr-505 (equivalent to Tyr-529 in c-Src) and Tyr-394 (equivalent to Tyr-418 in c-Src). Tyr-505 is located near the carboxyl terminus of Lck and, when phosphorylated, associates intramolecularly with the SH2 domain in the amino-terminal half of the protein. This helps stabilise Lck in a conformation that, biologically, is relatively inactive. In the absence of phosphorylation at Tyr-505, intramolecular binding of the carboxyl terminus to the SH2 domain does not occur, and Lck exhibits increased activity in vivo.
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab4901の使用に適用されます**
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use a concentration of 0.1 - 1 µg/ml. Predicted molecular weight: 60 kDa.

ターゲット情報

機能	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.

組織特異性

Expressed specifically in lymphoid cells.

関連疾患

Note=A chromosomal aberration involving LCK is found in leukemias. Translocation t(1;7) (p34;q34) with TCRB.

配列類似性

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.

ドメイン

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

翻訳後修飾

Phosphorylated on Tyr-394, which increases enzymatic activity (By similarity). Phosphorylated on Tyr-505, which decreases activity.

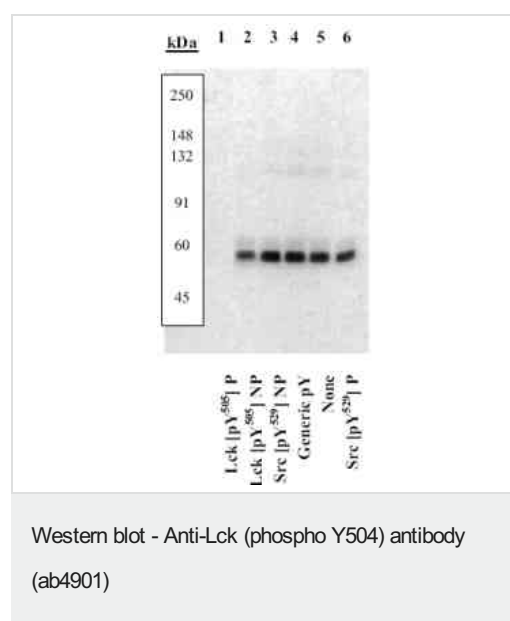
細胞内局在

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

製品の状態

This protein is known to be similar in amino acid sequence to HCK (P08631), FYN (P06241), YES1 (P07947), SRC (P12931), and LYN (P07948). Therefore, cross-reactivity with these homologous proteins may be observed. We would be happy to provide immunogen alignment information upon request.

画像



Peptide Competition: Full length untagged recombinant human Lck protein was added to control cell extract which does not contain Lck and then resolved by SDS-PAGE on a 10% Tris-glycine gel. The proteins then were transferred to nitrocellulose and incubated with 0.50 µg/mL ab4901 antibody, following prior incubation with: (1) the appropriately phosphorylated peptide immunogen, (2) the nonphosphorylated peptide corresponding to the peptide immunogen, (3) the non-phosphorylated peptide derived from the corresponding region of Src, (4) a generic phosphotyrosine containing peptide, (5) no peptide, and (6) the phosphorylated peptide derived from the corresponding region of Src. After washing, membranes were incubated with goat F(ab')₂ anti-rabbit IgG alkaline phosphatase conjugate and bands were detected using the Tropix WesternStar detection method. The data presented here demonstrate that only the phosphopeptide corresponding to this site completely blocks t

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors