abcam

Product datasheet

Recombinant human LIM Kinase 1 protein ab174066

画像数 2

製品の詳細

製品名 Recombinant human LIM Kinase 1 protein

生理活性 The specific activity of LIMK1 was determined to be 8 nmol/min/mg.

精製度 > 95 % Densitometry.

Affinity purified.

発現系 Baculovirus infected Sf9 cells

アクセッション番号 <u>P53667</u>

タンパク質長 Protein fragment

Animal free No

由来 Recombinant

生物種 Human

配列 GSSARQKPVLRSCSIDRSPGAGSLGSPASQRKDLGRSESLRV

VCRPHRIF

RPSDLIHGEVLGKGCFGQAIKVTHRETGEVMVMKELIRFDEE

TQRTFLKE

VKVMRCLEHPNVLKFIGVLYKDKRLNFITEYIKGGTLRGIIK

SMDSQYPW

SQRVSFAKDIASGMAYLHSMNIIHRDLNSHNCLVRENKNVVV

ADFGLARL

MVDEKTQPEGLRSLKKPDRKKRYTVVGNPYWMAPEMINGRSY

DEKVDVFS

FGIVLCEIIGRVNADPDYLPRTMDFGLNVRGFLDRYCPPNCP

PSFFPIT\

RCCDLDPEKRPSFVKLEHWLETLRMHLAGHLPLGPQLEQLDR

GFWETYRR GESG

予測される分子量 65 kDa including tags

領域 285 to 638

タグ proprietary tag N-Terminus

特性

Our <u>Abpromise guarantee</u> covers the use of ab174066 in the following tested applications.

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

1

アプリケーション SDS-PAGE

Western blot

Functional Studies

製品の状態

Liquid

備考

 $\underline{ab85154} \ (\text{Human Cofilin full length protein}) \ \text{and} \ \underline{ab64311} \ (\text{Myelin Basic Protein protein}) \ \text{can be}$

utilized as a substrate for assessing kinase activity

前処理および保存

保存方法および安定性

Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.

pH: 7.50

Constituents: 25% Glycerol (glycerin, glycerine), 0.79% Tris HCl, 0.88% Sodium chloride, 0.31%

Glutathione, 0.003% EDTA, 0.004% DTT, 0.002% PMSF

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

関連情報

機能

Protein kinase which regulates actin filament dynamics. Phosphorylates and inactivates the actin binding/depolymerizing factor cofilin, thereby stabilizing the actin cytoskeleton. Stimulates axonal outgrowth and may be involved in brain development. Isoform 3 has a dominant negative effect on actin cytoskeletal changes.

組織特異性

Highest expression in both adult and fetal nervous system. Detected ubiquitously throughout the different regions of adult brain, with highest levels in the cerebral cortex. Expressed to a lesser extent in heart and skeletal muscle.

関連疾患

Note=LIMK1 is located in the Williams-Beuren syndrome (WBS) critical region. WBS results from a hemizygous deletion of several genes on chromosome 7q11.23, thought to arise as a consequence of unequal crossing over between highly homologous low-copy repeat sequences flanking the deleted region.

配列類似性

Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family.

Contains 2 LIM zinc-binding domains. Contains 1 PDZ (DHR) domain. Contains 1 protein kinase domain.

翻訳後修飾

Autophosphorylated.

 $Phosphory lated \ on \ serine \ and/or \ three nine \ residues \ by \ ROCK1. \ May \ be \ dephosphory lated \ and$

inactivated by SSH1.

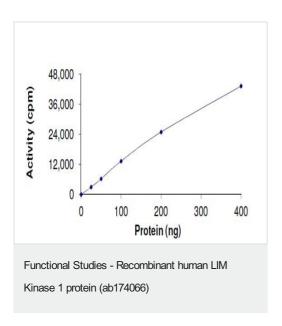
Ubiquitinated. 'Lys-48'-linked polyubiquitination by RNF6 leads to proteasomal degradation through the 26S proteasome, modulating LIMK1 levels in the growth cone and its effect on axonal

outgrowth. Also polyubiquitinated by RLIM.

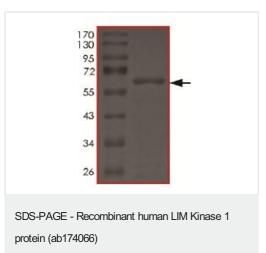
細胞内局在

Cytoplasm. Cell projection > growth cone.

画像



Kinase Assay demonstrating specific activity of ab174066



SDS-PAGE showing ab174066

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

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