

Datasheet for ABIN7563436

LIM Domain Kinase 1 Protein (LIMK1) (AA 1-647) (His tag)[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	LIM Domain Kinase 1 (LIMK1)
Protein Characteristics:	AA 1-647
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LIM Domain Kinase 1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Limk1 Protein expressed in mammalian cells.
Sequence:	MRLTLLCCTW REERMGEEGS ELPVCASCGQ RIYDGQYLQA LNADWHADCF RCCECSVLSL HQYYEKDGLL FCKKDYWARY GESCHGCSEH ITKGLVMVAG ELKYHPECFI CLACGNFIGD GDTYTLVEHS KLYCGQCYYQ TVVTPVIEQI LPDSPGSHLP HTVTLVSIPA SAHGKRGLSV SIDPPHGPPG CGTEHSHTVR VQGVDPGCMS PDVKNSIHVG DRILEINGTP IRNVPLDEID LLIQETSRLQ QLTLEHDPHD SLGHGVPVSDP SPLSSPVHTP SGQAASSARQ KPVLRSCLD TSPGTSSLAS PASQRKDLGR SESLRVVCRP HRIFRPSDLI HGEVLGKGC F GQAIKVTHRE TGEVMVMKEL IRFDEETQRT FLKEVKVMRC LEHPNVLFKI GVLYKDKRLN FITEYIKGGT LRGIIKNMDS QYPWSQRVSF AKDIASGMAY LHSMNIIHRD LNSHNCLVRE NNRNVVADFG LARLMIDEKN QSEDLRSLKK PDRKKRYTVV GNPYWMAPEM INGRSYDEKV DVFSFGIVLC EIIGRVNADP DYLPRTMDFG LNVRGFLDRY CPPNCPPSFF PITVRCCDL D PEKRPSFVCL EQWLETLRMH LSGHLPLGPQ LEQLERGFWE TYRRGESSLP AHPEVPD Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a

Product Details

different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Specificity: If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Characteristics: Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity: > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade: custom-made

Target Details

Target: LIM Domain Kinase 1 (LIMK1)

Alternative Name: Limk1 ([LIMK1 Products](#))

Background: LIM domain kinase 1 (LIMK-1) (EC 2.7.11.1) (KIZ-1),FUNCTION: Serine/threonine-protein kinase that plays an essential role in the regulation of actin filament dynamics (PubMed:15056216, PubMed:16204183). Acts downstream of several Rho family GTPase signal transduction pathways (PubMed:15056216). Activated by upstream kinases including ROCK1, PAK1 and PAK4, which phosphorylate LIMK1 on a threonine residue located in its activation loop. LIMK1 subsequently phosphorylates and inactivates the actin binding/depolymerizing factors cofilin-1/CFL1, cofilin-2/CFL2 and destrin/DSTN, thereby preventing the cleavage of filamentous actin (F-actin), and stabilizing the actin cytoskeleton. In this way LIMK1 regulates several actin-dependent biological processes including cell motility, cell cycle progression, and

Target Details

differentiation. Phosphorylates TPPP on serine residues, thereby promoting microtubule disassembly. Stimulates axonal outgrowth and may be involved in brain development (By similarity). {ECO:0000250|UniProtKB:P53667, ECO:0000269|PubMed:15056216, ECO:0000269|PubMed:16204183}.

Molecular Weight: 72.8 kDa

UniProt: [P53668](#)

Pathways: [Caspase Cascade in Apoptosis, Regulation of Cell Size, CXCR4-mediated Signaling Events](#)

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months