

Product datasheet for TP318058

OriGene Technologies, Inc.

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LIM Kinase 1 (LIMK1) (NM_002314) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human LIM domain kinase 1 (LIMK1), 20 μg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC218058 representing NM_002314 or AA Sequence: Red=Cloning site Green=Tags(s)

MRLTLLCCTWREERMGEEGSELPVCASCGQRIYDGQYLQALNADWHADCFRCCDCSASLSHQYYEKDGQ

L

FCKKDYWARYGESCHGCSEQITKGLVMVAGELKYHPECFICLTCGTFIGDGDTYTLVEHSKLYCGHCYYQ TVVTPVIEQILPDSPGSHLPHTVTLVSIPASSHGKRGLSVSIDPPHGPPGCGTEHSHTVRVQGVDPGCMS PDVKNSIHVGDRILEINGTPIRNVPLDEIDLLIQETSRLLQLTLEHDPHDTLGHGLGPETSPLSSPAYTP SGEAGSSARQKPVLRSCSIDRSPGAGSLGSPASQRKDLGRSESLRVVCRPHRIFRPSDLIHGEVLGKGCF GQAIKVTHRETGEVMVMKELIRFDEETQRTFLKEVKVMRCLEHPNVLKFIGVLYKDKRLNFITEYIKGGT LRGIIKSMDSQYPWSQRVSFAKDIASGMAYLHSMNIIHRDLNSHNCLVRENKNVVVADFGLARLMVDEKT QPEGLRSLKKPDRKKRYTVVGNPYWMAPEMINGRSYDEKVDVFSFGIVLCEIIGRVNADPDYLPRTMDFG LNVRGFLDRYCPPNCPPSFFPITVRCCDLDPEKRPSFVKLEHWLETLRMHLAGHLPLGPQLEQLDRGFWE

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-Myc/DDK
Predicted MW: 72.4 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

TYRRGESGLPAHPEVPD

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.



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Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 002305

 Locus ID:
 3984

 UniProt ID:
 P53667

 RefSeq Size:
 3332

 Cytogenetics:
 7q11.23

 RefSeq ORF:
 1941

Synonyms: LIMK; LIMK-1

Summary: There are approximately 40 known eukaryotic LIM proteins, so named for the LIM domains

they contain. LIM domains are highly conserved cysteine-rich structures containing 2 zinc fingers. Although zinc fingers usually function by binding to DNA or RNA, the LIM motif probably mediates protein-protein interactions. LIM kinase-1 and LIM kinase-2 belong to a small subfamily with a unique combination of 2 N-terminal LIM motifs and a C-terminal protein kinase domain. LIMK1 is a serine/threonine kinase that regulates actin polymerization via phosphorylation and inactivation of the actin binding factor cofilin. This protein is ubiquitously expressed during development and plays a role in many cellular processes associated with cytoskeletal structure. This protein also stimulates axon growth and may play a role in brain development. LIMK1 hemizygosity is implicated in the impaired visuospatial

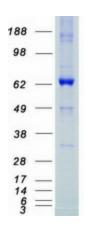
constructive cognition of Williams syndrome. Alternative splicing results in multiple transcript

variants encoding distinct isoforms.[provided by RefSeq, Feb 2011]

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Axon guidance, Fc gamma R-mediated phagocytosis, Regulation of actin cytoskeleton

Product images:



Coomassie blue staining of purified LIMK1 protein (Cat# TP318058). The protein was produced from HEK293T cells transfected with LIMK1 cDNA clone (Cat# [RC218058]) using MegaTran 2.0 (Cat# [TT210002]).