

Product datasheet for PH318058

LIM Kinase 1 (LIMK1) (NM_002314) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	LIMK1 MS Standard C13 and N15-labeled recombinant protein (NP_002305)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC218058
Predicted MW:	72.4 kDa
Protein Sequence:	>RC218058 representing NM_002314 Red=Cloning site Green=Tags(s)

MRLTLLCCTWREERMGEEGSEL PVCASCGRQRIYDGQYLQALNADWHADCFRCCDCSASLSHQYYEKDGQL
FCKKDYWARYGESCHGCSEQITKGLVMVAGELKYHPECFICLTCGTFIGDGDYTLVEHSKLYCGHCYYQ
TVVTPVIEQILPDSPGSHLPHTVTLVSI PASSHGKRLSVSIDPPHPPGCGTEHSHTVRVQGVDPGCM
PDVKNSIHVGDRILEINGTPIRNVPLDEIDLLIQETSRLQLTLEHDPHDTLGHGLGPETSPLSSPAYTP
SGEAGSSARQKPVLRSCSIDRSPGAGSLGSPASQRKDLGRSESLRVVCRPHRIFRPSDLIHGEVLGKGC
GQAIKVTHRETGEVMMKELIRFDEETQRTFLKEVKVMRCLEHPNVLFKIGVLYKDKRLNFITEYIKGGT
LRGIKSMDSQYPWSQRVSFAKDIASGMAYLHSMNIIHRDLNSHNCLVRENKNVVVADFLARLMVDEKT
QPEGLRSLKKPDRKKRYTVVGNPYWMAPEMINGRSYDEKVDVFSFGIVLCEIIGRVNADPDYLPRTMDFG
LNVRGFLDRYCPNCPSPFFPITVRCCDLPEKRPSFVKLEHWLETLRMHLAHLPLGPQLEQLDRGFWE
TYRRGESGLPAHPEVPD

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u>NP_002305</u>
RefSeq Size:	3332



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RefSeq ORF: 1941

Synonyms: LIMK; LIMK-1

Locus ID: 3984

UniProt ID: [P53667](#)

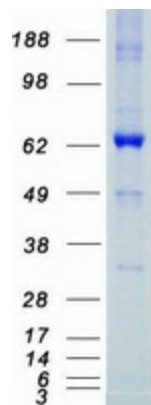
Cytogenetics: 7q11.23

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 hemizyosity 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]).