OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC331586

LIM Kinase 1 (LIMK1) (NM_001204426) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: LIM Kinase 1 (LIMK1) (NM_001204426) Human Untagged Clone

Tag: Tag Free

Symbol: LIM Kinase 1

Synonyms: LIMK; LIMK-1

Vector: pCMV6-Entry (PS100001)

Fully Sequenced ORF:

>SC331586 representing NM_001204426.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGCTGTTGGCTTCAGCCCCAAGAAGACGCCGCTTCCTCCAGAGGGCTAAGTGTTGTGACTGCAGTGCC
TCCCTGTCGCACCAGTACTATGAGAAGGATGGGCAGCTCTTCTGCAAGAAGGACTACTGGGCCCGCTAT
GGCGAGTCCTGCCATGGGTGCTCTGAGCAAATCACCAAGGGACTGGTTATGGTGGCTGGGGAGCTGAAG
TACCACCCCGAGTGTTTCATCTGCCTCACGTGTGGGACCTTTATCGGTGACGGGGACACCTACACGCTG
GTGGAGCACTCCAAGCTGTACTGCGGGCACTGCTACTACCAGACTGTGGTGACCCCCGTCATCGAGCAG
ATCCTGCCTGACTCCCCTGGCTCCCACCTGCCCCACACCGTCACCCTGGTGTCCATCCCAGCCTCATCT
CATGGCAAGCGTGGACTTTCAGTCTCCATTGACCCCCCGCACGGCCCACCGGGCTGTGGCACCGAGCAC
TCACACACCGTCCGCGTCCAGGGAGTGGATCCGGGCTGCATGAGCCCAGATGTGAAGAATTCCATCCAC
GTCGGAGACCGGATCTTGGAAATCAATGGCACGCCCATCCGAAATGTGCCCCTGGACGAGATTGACCTG
CTGATTCAGGAAACCAGCCGCCTGCTCCAGCTGACCCTCGAGCATGACCCTCACGATACACTGGGCCAC
GGGCTGGGGCCTGAGACCAGCCCCCTGAGCTCTCCGGCTTATACTCCCAGCGGGGAGGCGGGCAGCTCT
GCCCGGCAGAAACCTGTCTTGAGGAGCTGCAGCATCGACAGGTCTCCGGGCGCTGGCTCACTGGGCTCC
CCGGCCTCCCAGCGCAAGGACCTGGGTCGCTCTGAGTCCCTCCGCGTAGTCTGCCGGCCACACCGCATC
TTCCGGCCGTCGGACCTCATCCACGGGGAGGTGCTGGGCAAGGGCTGCTTCGGCCAGGCTATCAAGGTG
ACACACCGTGAGACAGGTGAGGTGATGGTGATGAAGGAGCTGATCCGGTTCGACGAGGAGACCCAGAGG
ACGTTCCTCAAGGAGGTGAAGGTCATGCGATGCCTGGAACACCCCAACGTGCTCAAGTTCATCGGGGTG
CTCTACAAGGACAAGAGGCTCAACTTCATCACTGAGTACATCAAGGGCGGCACGCTCCGGGGCATCATC
AAGAGCATGGACAGCCAGTACCCATGGAGCCAGAGAGTGAGCTTTGCCAAGGACATCGCATCAGGGATG
GCCTACCTCCACTCCATGAACATCATCCACCGAGACCTCAACTCCCACAACTGCCTGGTCCGCGAGAAC
AAGAATGTGGTGGTGGCTGACTTCGGGCTGGCGCGTCTCATGGTGGACGAGAAGACTCAGCCTGAGGGC
CTGCGGAGCCTCAAGAAGCCAGACCGCAAGAAGCGCTACACCGTGGTGGGCAACCCCTACTGGATGGCA
CCTGAGATGATCAACGGCCGCAGCTATGATGAGAAGGTGGATGTGTTCTCCTTTGGGATCGTCCTGTGC
GAGATCATCGGGCGGGTGAACGCAGACCCTGACTACCTGCCCCGCACCATGGACTTTGGCCTCAACGTG
CGAGGATTCCTGGACCGCTACTGCCCCCCAAACTGCCCCCCGAGCTTCTTCCCCATCACCGTGCGCTGT
TGCGATCTGGACCCCGAGAAGAGGCCATCCTTTGTGAAGCTGGAACACTGGCTGGAGACCCTCCGCATG
CACCTGGCCGGCCACCTGCCACTGGGCCCACAGCTGGAGCAGCTGGACAGAGGTTTCTGGGAGACCTAC
CGGCGCGGCGAGAGCGGACTGCCTGCCCACCCTGAGGTCCCCGACTGA

View online »

Restriction Sites:	SgfI-MluI
ACCN:	NM_001204426
Insert Size:	1842 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001204426.1
RefSeq Size:	3176 bp
RefSeq ORF:	1842 bp
Locus ID:	3984
UniProt ID:	P53667
Cytogenetics:	7q11.23
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Axon guidance, Fc gamma R-mediated phagocytosis, Regulation of actin cytoskeleton
MW:	68.7 kDa

Gene 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]
Transcript Variant: This variant (2) lacks multiple exons at the 5' end and uses a different start codon, compared to variant 1. This variant encodes an isoform (2) with a shorter and distinct N-terminus that lacks one of two LIM zinc-binding domains, compared to isoform 1.