

Product datasheet for **SC123647**

LIM kinase 2 (LIMK2) (BC013051) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LIM kinase 2 (LIMK2) (BC013051) Human Untagged Clone
Tag:	Tag Free
Symbol:	LIM kinase 2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene sequence for BC013051 edited
GGGAGGAGCCATCCCAGCCATGAGCCCCTGTGGGAATCTGCTGGGGGCCAAGTGGCCTGG
AGTCTCAGGCTCCCGCAGCTGCTCCGGAGGGAGAGGTGAGCTCAGGGCAGCCTGCCTGC
AGCCAGAGGTGCCGGGAGCCCCGGGCTGTCATGGTGGCCATCTACAGCCGGCCTGAGGC
AGTCACAGACGGATTTGCAGCTGAGCCTGTCTATCTGGTGTGGGAAGAAGATGGGGAGTT
ACTTGTCAAGTCCCGGCTTACTTACCTCCAGAGACCTGTTTCGGTGTTCAGAATGCCAGG
ATTCCCTCACCACTGGTACTATGAGAAGGATGGGAAGCTCTACTGCCCAAGGACTACT
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TTGAGGATGGGGATGCATATGCACTGGTGCAGCATGCCACCCTCTACTGTGGGAAGTGCC
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TCAACCGGATGCACATCAGTCCCAACAATCGAAACGCCATCCACCCTGGGGACCGCATCC
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TACGGAAGCACCTCAACCTAGAGGAGTGGATCCTGGAGCAGCTCACGCGCCTCTACGACT
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AGAAGAAGTGAGGGTCCCGACCCAGGCGAACGGTGGCTCCCATAGGACAATCGCTACCC
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TGGATTTTTTATTGTTATTAAGTATGAGGACTTTGTGTTTTTATATTGACTCTGCGGC
ACGGGCCCTTTAATAAAGCGAGGTAGGGTACGCCTTTGGTGCAGCTCAAAAAAAAAAAAA
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TGTTCTTTATAGCCAAGGACCGCAGTCTTCAGTAACACCAGTGTAAAAGCTTGAGGA
GAAATTGTGAAGCTACACAGTATTTGTTTTCTAATACCTCTTGCATTCTAATATCTTT
AATTTATTAATAAATATATATATACAGTAAAAAAAAAAAAAAAAAAAA
    
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5' Read Nucleotide Sequence:	>OriGene 5' read for BC013051 unedited CCGAATTTTGTAAATACGACTTCACTATAGGGCGGCCGCGATTCCCAGGATATCGTCGACC CACGCGTCCGGGGAGGAGCCATCCCAGCCATGAGCCCCTGTGGGAATCTGCTGGGGGCCA AGTGGCCTGGAGTCTCAGGCTCCCGCAGCTGCTCCGGAGGGAGAGGTGAGCTCAGGGCA GCCTGCCTGCAGCCAGAGGTGCCGGGAGCCCCGGGCTGTATGGTGGCCATCTACAGCC GGCCTGAGGCAGTCACAGACGGATTTCAGCTGAGCCTGTCTATCTGGTGTGGGAAGAAG ATGGGGAGTTACTTGTCACTCCCGGCTTACTTCACCTCCAGAGACCTGTTTCGGTGTCA GAATGCCAGGATCCCTCACCACCTGGTACTATGAGAAGGATGGGAAGCTCTACTGCCCC AAGGACTACTGGGGGAAGTTTGGGGAGTTCTGTATGGGTGCTCCTGCTGATGACAGGG CCTTTTATGGTGGCTGGGGAGTTCAAGTACCACCCAGAGTGCTTTGCCTGTATGAGCTGC AAAGTGATCATTGAGGATGGNGATGCATATGCACTGGTGCAGCATGCCACCCTCTACTGT GGGAAAGTGCCACAATGAGGTGGTGGTGGCACCATGTTTGAGAGACTCTCACAGAGTCTG TTCAGGAGCAGCTGCCCTACTTTGTACGCTCATCTTCATGGCCGGCCACCATGTAGGGG CAGCGGGGCTCCTCCGGTCTGGGAGAGGGCCTGGCTCAACTACCCACCCCTGGGCA GGTGAAAGAGTCAACCGAATGCACTTAGTCCCCACAATCGAAACGCCTCCACCCGGGG ACCCCATCCTGGAAACCAAGGGACCCCGTCCCCACCTTTCGGGGGAGGAGGTGGGGGT CAATTAGCCAGAAAGCCCCACACTTAGCCGTGGAGTGAAGAGAAC
Restriction Sites:	Please inquire
ACCN:	BC013051
Insert Size:	2805 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:	<ol style="list-style-type: none"> 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:	BC013051.1 , AAH13051.1
RefSeq Size:	2805 bp
Locus ID:	3985
Cytogenetics:	22q12.2
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Axon guidance, Fc gamma R-mediated phagocytosis, Regulation of actin cytoskeleton

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. The protein encoded by this gene is phosphorylated and activated by ROCK, a downstream effector of Rho, and the encoded protein, in turn, phosphorylates cofilin, inhibiting its actin-depolymerizing activity. It is thought that this pathway contributes to Rho-induced reorganization of the actin cytoskeleton. At least three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]