

Product datasheet for **MR231352**

Limch1 (NM_001256122) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Limch1 (NM_001256122) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Limch1
Synonyms:	3732412D22Rik; mKIAA1102
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR231352 representing NM_001256122
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGATCCTGAAAGACAGGAGACTGACGACATTGATAGCCGAAGCGCAGCATCCGAGACAGTGGCTACA
 TCGACTGCTGGGACTCTGAACGCAGCGACTCCCTCTCCTCCTCGCCACGGACGGGATGACTCCTTTGA
 CAGCCTGGATTCTTTGGCTCCCCTCCAGGCAGACACCTTCGCCAGATGTAGTTCTCAGGGGAAGCAGT
 GATGGAAGAGGAAGCGATTCTGAATCAGACTTGCCGCACCGGAAGTTGCCAGATGTGAAGAAAGATGATA
 TGTCCGCACGAAGGACTTCTCATGGTGAGCCGAAATCAGCAGTGCCTTTAAACCAGTACCTCCGAACAA
 AAGCAACCAGACGGCCTACGTCGCCGGCCTCTGAGAAAGAAGAAGCGGAGCGGGAGGAATTCCAGGAAG
 AGTTGGAGCACCGCCACCTCCCCCTGGGTGGGAAAGGCCCTTCAGATACGGTCCCGAAGTCTGTGT
 CAGATGACGCAGAGACGAGTATGTTTGACATGCGGTGTGAGGAGGAGGCAGCGGTGCTGCCGCACAG
 CAGGGCCCGCCAGGAGCAGCTGCAGCTGATAAATAACCAGCTGAGGGAAGAGGACGACAAATGGCAAGAT
 GACCTGGCTCGCTGGAAGAGCCGGAGAAGAAGCGCTTCTCAGGACTTGATCAAGAAAGAGGAAGAAAGGA
 AAAAAATGGAGAAGCTGATGTCTGGGGAAGATGGGACAAGTGAGCGGAGGAAAAGCATCAAACTTACAG
 AGAAATCGTCCAAGAAAAGAGCGGAGAGAGAGGGAACCTCATGAGGCGTACAAGAACGCAAGTCCGAG
 GAGGAGGCCGAGGGGATCCTCCAGCAGTACATCGAGAGGTTACCATCAGTGAGGCTGTCTCGAACGCT
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 CAAACACAGTGCCTATGCTGACACCCAGCCCTTACTCCAGCCAAAACTCTCAAGAGGTTCTGAAGAG
 TTTTAAGGTAGATGGGAAGGTCAGCATGAATGGGGAAATGGCCCTGGAGATGAGGAAGGAAAGGAAAA
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 GAAAGGCCAGGGACAGGGGATTTGGAGCCTGACTCGGCAGAACCCAGCACTTTACGACAACTGTGACTC
 GGTGCAGCCCAACAGTGGCCTTGGTGGAGTTTTCATCCAACCCGAGCTGAAGAATGAGGTGCCAGAACA
 AGGCCAGAAGAAGCCAGAAGATGAGATGAGTGGGAAGGTGGAGTTAGTGTGTACAGAAGGTGGCAAAG
 CCAAAATCCCAGAGCCTGAAGCAACCCTGACGTTTCCATTTCTGACAAAATGCCTGAAACCAACCAAC
 TACATTTGCCAAATCCCAGTTCTCAAGCGGATTCTCAAGCAGTGAAGTCCCTGGGAGCACACCCTT
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 GGCTAACCCCTGAAATCTCCGTGTCAAAGGAATCCATCAGGACCCGAGCTGGAGGCAGAGGCTGGGGCC
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 AAGGACAGCTCGGAGATGCAGTAAGCGGGACAGACGTGAGGATTCGCAATGGTCTCTAACTGTACCGA
 CTGCTACATGCGATCCAGAAGTCCGGCCAGCCTACAACACTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR231352 representing NM_001256122
 Red=Cloning site Green=Tags(s)

MDPERQETDDIDSPKRSIRD SGYIDCWDSERSDSLSPPRHGRDDSFDSLDFGSRSRQTPSPDVVLRGSS
 DGRGSDSESDLPHRKL PDVKKDDMSARRTSHGEPKSAVFPNQYLPNKSNTAYVPA PLRKKKAERE EFRK
 SWSTATSPLGGERPFRYPRTPVSDDAESTSMFDMRCEEEAAVLPHSRARQEQLQLINNQLREEDDKWQD
 DLARWKSRRRSASQDLIKKEEERKKMEKLMSEGEDGTERRRSIKTYREIVQEKERRERELHEAYKNARSQ
 EEAE GILQQYIERFTISEAVLERLEMPKILERSHSTEPNVSSFPNDPSPMKYLRQQSLPPPKFTATVETT
 IARTSVPEIASAGTGSPSKIITPNTVPMLTPRPYSQPKNSQEV LKTFKVDGKVMNGEMAPGDEEGKEK
 EGPAAAA PPSLTKSQMFEGVATVHDS PVQVKQGSNSIEINIKKPNSAPQELTAASEETESNGQEDEDGE
 ERPGTGDLEPDSAEPQHFTTTVTRCSPTVALVEFSSNPQLKNEVPEQGQKPEDEM SGKVELVLSQKVAK
 PKSPEPEATLTFPFLDKMPETNQLHLPNPSSQADSPSSEKSPGSTPFKFWAWDPEEERRRQEKWQEQER
 LLQERYQKEQDKLKEWEKAQKEVEEEERRYYEEERKIIEDTVVPFTISSSSADQLSTLSVTEGSGTRN
 KMDLENC PDKENERRQKTPFQENDGDSLLKTREGGLPEEQSLTPSPSANPEISVSKGIHQDPQLEA EAGA
 PHCGTNPQAQDPPRNQIPNPPTSTSE DVKPKTLALEKTIHQMESPGERRRSISGKKLCSSCGLTLGK
 GAAMI IETLNL YFHIQCFRCGICKGQLGDAVSGTDVIRINGLLNCTDCYMRSR SAGQP TTL

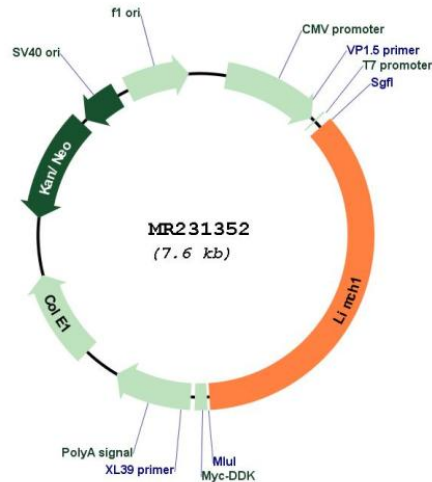
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001256122

ORF Size: 2703 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001256122.2](#)

RefSeq Size: 5904 bp

RefSeq ORF: 2706 bp

Locus ID: 77569

UniProt ID: [Q3UH68](#)

Cytogenetics: 5 C3.1

MW: 101.5 kDa

Gene Summary: Actin stress fibers-associated protein that activates non-muscle myosin IIa. Activates the non-muscle myosin IIa complex by promoting the phosphorylation of its regulatory subunit MRLC/MYL9. Through the activation of non-muscle myosin IIa, positively regulates actin stress fibers assembly and stabilizes focal adhesions. It therefore negatively regulates cell spreading and cell migration.[UniProtKB/Swiss-Prot Function]