

Product datasheet for **MG223602**

Limch1 (NM_001001980) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Limch1 (NM_001001980) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Limch1
Synonyms:	3732412D22Rik; mKIAA1102
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG223602 representing NM_001001980 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTTGCCCCGCTCTCGGTCTGGAAGTCTTCAACCCCTGCAGCCCGAACCCCTCCGGAGCCTGCCT
TCGCCGAGGCACAGAAGTGGATCGAGCAAGTCACTGGTCGAAGTTTTGGTGACAAAGACTCCGGACAGG
ACTAGAAAATGGGATCCTCCTTTGCGAGTTGCTGAATGCTATAAAGCCAGGACTTGTTAAAAAGATCAAT
AGATTGCCTACCCCATTCGAGGATTGGACAATACCATCTTATTCTTGAGAGGCTGTAAGGAGCTTGGCC
TTAAAGAATCTCAACTCTTTGACCCGAGTGACCTCCAGGATACCTCCAACAGGGTCACTGTCAAGAACCT
CGATTATAGCAGGAAGCTGAAAAACGTGCTAGTGACCATTTACTGGCTGGGGAAAGCTGCAACAGCTGT
GCATCCTACGGTGAACACACTGAACCTGAAGGAGTTTGAAGGGCTGTTGGCTCAGATGCGAAAGGAGA
CTGACGACATTGATAGCCCGAAGCGCAGCATCCGAGACAGTGGCTACATCGACTGCTGGGACTCTGAACG
CAGCGACTCCCTCTCCTCCTCGCCACGGACGGGATGACTCCTTTGACAGCCTGGATTCTTTTGGCTCC
CGCTCCAGGCAGACACCTTCGCCAGATGTATTCTCAGGGGAAGCAGTGTGAAGAGGAAGCGATTCTG
AATCAGACTTGCCGCACCGAAGTTGCCAGATGTGAAGAAAGATGATATGTCCGCACGAAGGACTTCTCA
TGGTGAGCCGAAATCAGCAGTGCCTTTAAACAGTACCTCCCGAACAAAAGCAACCAGACGGCCTACGTC
CCGGCCCTCTGAGAAAGAAGAAGCGGGAGGGAATTCAGGAAGAGTTGGAGCACCGCCACCTCCC
CCCTGGGTGGGGAAAGGCCCTTCAGATACGGTCCAGAACTCCTGTGTCAGATGACGAGAGAGCAGCAG
TATGTTTGACATGCGGTGTGAGGAGGAGGCAGCGGTGCTGCCGCACAGCAGGGCCCGCCAGGAGCAGCTG
CAGCTGATAAATAACAGCTGAGGGAAGAGGACGACAAATGGCAAGATGACCTGGCTCGCTGGAAGAGCC
GGAGAAGAAGCGCTTCTCAGGACTTGATCAAGAAAGAGGAAGAAAGGAAAAAATGGAGAAGCTGATGTC
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CAGCAGTCACTGCCCCACCCAAGTTCCTGACCACGGTTGAGACCACCATAGCTCGACCAGTGTCCCAG
 AGAGCATTGCGTCAGCAGGCACTGGGTCTCCAAGCAAAATCATCACTCCAAACACAGTGCCTATGCTGAC
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 TCAAGCGGATTCTCAAGCAGTGAAGTCCCCTGGGAGCACACCCTTTAAGTTCGGGCATGGGACCCA
 GAAGAGGAGCGCCGGCAGAGGAAAATGGCAGCAGGAGCAGGAACGTCTGCTGCAGGAGAGGTATCAGA
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 CAGACAAAAGAAAACGAGAGAAGACAGAAGACGCCTTTCCAGGAGAATGACGGTGATTTCATTGCTCAAAC
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 TCAAAAAGGAATCCATCAGGACCCGACGCTGGAGGCAGAGGCTGGGGCCCCACACTGTGGTACAAACCCAC
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 ATAAGCGGGAAGAAACTGTCTCCTCCTGCGGGCTCACTTTGGGTAAGGTGCTGCGATGATCATCGAGA
 CCCTGAATCTCTACTTTACATTCACTGTTTCAGGTGCGGCATCTGTAAGGACAGCTCGGAGATGCAGT
 AAGCGGGACAGAGCTCAGGATTCGCAATGGTCTCCTAAACTGTACCGACTGCTACATGCGATCCAGAAGT
 GCCGGCCAGCCTACAACCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG223602 representing NM_001001980
 Red=Cloning site Green=Tags(s)

MACPALGLEVLQPLQPEPPPEPAFAEAQKWIEQVTGRSFGDKDFRTGLENGILLCELLNAIKPGLVKKIN
 RLPTPIAGLDNTILFLRGCKELGLKESQLFDPSDLQDTSNRVTVKNLDYSRKLKNLVTIYWLGAANSC
 ASYGGTTLNLKEFEGLLAQMRKETDDIDSPKRSIRDSGYIDCWDSERSDSLSPRRHGRDDSFDSLDSFGS
 RSRQTPSPDVVLRGSSDGRGSDSESDLPHRKLDPVKKDDMSARRTSHGEPKSAVFPNQYLPNKSNTAYV
 PAPLRKKAEREFRKSWSTATSPLGGERPFRYPRTVSDDAESTSMFDMRCEEEAAVLPHSRARQEQ
 QLINNQLREEDDKWQDDLARWKSRRRSASQDLIKKEEERKKMEKLMSEGEDTSERRKSIKTYREIVQEKE
 RRERELHEAYKNARSQEEAEGILQYIERFTISEAVLERLEMPKILERSHSTEPNVSSFPNDPSPMKYLR
 QQSLPPPKFTATVETIARTSVPESIASAGTGSPSKIITPNTVPMLTPRPYSQPKNSQEVLKTFKVDGKV
 SMNGEMAPGDEEGKEKEGPAAAAAPGSLTKSQMFEGVATVHDSVPVQKQGSNSIEINIKKPNAPQELTA
 ASEETESNGQEDEDGEERPGTGDLEPDSAEPQHFTTTVTRCSPTVALVEFSSNPQLKNEVPEQGGKPED
 EMSGKVELVLSQKVAKPKSPEPEATLTFPFLDKMPETNQLHLPNPSSQADSPSSEKSPGSTPFKFWAWDP
 EEERRRQEKWQEQERLLQERYQKEQDKLKEEWEKAQKEVEEEERRRYEEERKIIEDTVVPFTISSSSAD
 QLSTSLSVTEGSGTRNKMDLENCDPKENERRQKTPFQENDGDSLLKTREGGLPEEQSLTPSPSANPEISV
 SKGIHQDPQLEAEAGAPHCGTNPQAQDPPRNQQIPNPPTSTSEDVKPKTLALEKTINHQMESPGERRKS
 ISGKLCSSCGLTLGKAAMI IETLNL YFHIQCFRCGICKGQLGDAVSGTDVIRIRNGLLNCTDCYMRSR
 AGQPTTL

TRTRPLE - GFP Tag - V

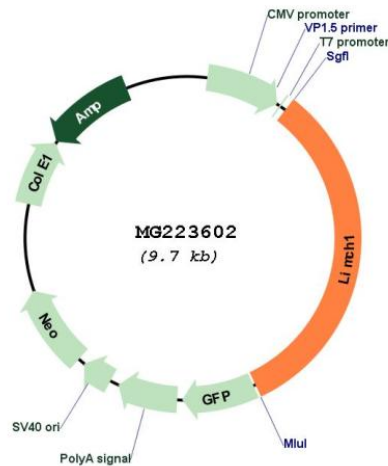
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001001980

ORF Size: 3171 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:	<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:	<u>NM_001001980.3</u>
RefSeq Size:	6142 bp
RefSeq ORF:	3174 bp
Locus ID:	77569
UniProt ID:	<u>Q3UH68</u>
Cytogenetics:	5 C3.1
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]