

Product datasheet for **RG226312**

LIMCH1 (NM_001112718) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LIMCH1 (NM_001112718) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LIMCH1
Synonyms:	LIMCH1A; LMO7B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG226312 representing NM_001112718 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTTGTCCCCTCTCGGTCTGGAAGCTCTTCAGCCCCTGCAGCCCGAGCCGCCCCCGAGCCCGCT
TCTCCGAGGCGCAGAAGTGGATTGAGCAAGTAAGTGCAGAAAGTTTGGTGATAAAGATTTTCGGACAGG
TTTAGAAAATGGAATCCTCCTCTGCGAGTTGCTGAATGCTATAAAGCCAGGACTTGTTAAAAAGATCAAT
AGATTGCCTACCCCATTCAGGACTGGACAATATTATCTTATTCTTGAGAGTTGTAAGAGCTCGGCC
TTAAAGAATCTCAACTTTTTGACCCGAGTGACCTCCAGGATACATCCAACAGAGTAACAGTCAAGAGCCT
TGATTATAGTAGGAAGCTGAAAAATGTATTAGTTACCATTACTGGCTGGGAAAAGCAGCAACAGCTGC
ACATCCTACAGCGGAACGACACTAAACCTGAAGGAGTTTGAAGGATTGTTGGCTCAGATCGAAAAGGACA
CTGATGACATTGAAAGTCTAAACGCGATATCCGAGACAGTGGCTACATCGACTGCTGGGATTCGAGCG
CAGCGACTCCCTCTCCTCCTCGCCACGGCAGAGATGATTCTTCGACAGCCTGGATTCTTTGGCTCT
CGCTCTCGGCAGACGCCTTACCAGATGTAGTCTCAGGGGAAGCAGCGATGGGAGAGGAAGCGACTCTG
AATCCGACTTGCCTCATCGGAAGCTGCCAGATGTGAAGAAGGATGACATGTCTGCACGGCGGACTTCCCA
TGGTGAGCCGAAATCAGCAGTGCCTTTAAACAGTACCTCCCGAACAAAAGCAATCAGACGGCCTACGTC
CCCGCGCTCTGAGAAAGAAGAAAGCAGAGAGAGAGGAATACCGCAAGAGCTGGAGTACCGCCACCTCCC
CGCTGGGTGGGGAGAGGCCCTTACGATACGGTCCGAGAACTCCTGTGTCTGATGACGAGAGAGACCCAG
CATGTTTGACATGCGGTGTGAGGAGGAGGCCGCGTGCAGCCGCACAGCAGGGCCCGCCAGGAGCAGCTG
CAGCTGATAAATAACAGCTGAGGGAAGAGGACGACAAATGGCAAGATGACCTGGCTCGTTGGAAGAGTC
GTAGAAGAAGTGTCTCAGGACTTAATCAAGAAAGAGGAAGAAAGGAAAAAATGGAGAAGTTACTGGC
TGGAGAAGATGGGACAAGTGAACGAAGGAAAAGCATCAAAACCTACAGAGAAATTGTTCAAGAAAAAGAG
CGGAGAGAGAGAGCTGCATGAAGCATATAAAGAACGCTCGTCCAGGAGGAGGAGGAGGGGATCTTTC
AACAGTACATTGAGAGGTTACCATCAGTGAGGCTGTTCTCGAACGCTTGGAGATGCCAAAAATTCTGGA
AAGAAGCCATTCAACAGAGCCAAATTTATCCTCCTTCTGAATGACCCCAATCCCATGAAATACCTGCGG



[View online >](#)

CAACAGTCACTGCCTCCACCCAAATTCCTGCCACTGTTGAAACCACCATTGCTCGTGCCAGTGTCTGG
 ATACCAGCATGTGAGCAGGCAGTGGGTCTCCAAGCAAACTGTCCTCCAAAGCAGTGCCTATGCTGAC
 ACCCAAGCCTTACTCCCAGCCAAAAATTCCTCAAGATGTTCTGAAGACCTTTAAGGTAGACGGGAAAGTC
 AGTGTGAATGGAGAGACGGTTCATAGAGAGGAGGAGAAGGAAAGAGAGTGTCCCACGGTGGCACCTGCC
 ACTCCTTAACCAATCCCAGATGTTTGAAGGTGTGCCAGAGTGCACGGGTCTCCACTGGAGCTGAAACA
 AGACAACGGTAGCATCGAGATCAACATAAAGAAGCCAACTCTGTTCCCCAAGAGCTCGCAGCAACCAC
 GAGAAAACGGAACCGAATAGTCAAGAGGACAAGAATGATGGTGGAAAAATCAAGAAAAGGGAATATAGAAC
 TTGCCTCATCAGAACCACAGCATTTCACAACAACGTGACTCGATGCAGCCCGACCGTGGCCTTTGTGGA
 ATTTCCCTCCAGCCCCAGCTGAAGAATGATGTGTGCGAAGAAAAAGACCAGAAGAAACCAGAAAATGAA
 ATGAGTGGAAAGGTGGAGTTGGTGTGTGACAAAAGGTGGTAAAGCCAAAATCTCCAGAACCAGAAAGCAA
 CGTGTGACATTTCCATTTCTGGACAAAATGCCTGAAGCCAACCACTACATTTGCCAAATCTCAATTTCTCA
 AGTGGATTCTCCAAGCAGTGAGAAGTCACTGTTATGACACCTTTAAGTTCTGGGCATGGGACCCAGAA
 GAGGAGCGCAGGCACAGGAAAAATGGCAACAGGAACAGGAACGTTTGTCCAGGAGAGATACCAGAAGG
 AGCAGGACAAGCTGAAAGAAGAGTGGGAAAAGGCCAAAAGGAGGTGGAAGAGGAAGAACGCAGATACTA
 TGAGGAGGAGCGTAAGATAATTGAAGACTGTGGTTCATTTACTGTTTCTTCAAGTTCGCTGACCAG
 CTGTCTACCTCTTCTCCATGACTGAAGCAGTGGGACAATGAATAAGATAGACCTGGGAAACTGTCAAG
 ATGAAAAACAAGACAGAAGATGGAAGAAATCATTCCAGGGAGATGACAGTGACTTATTGCTGAAGACTAG
 GGAAAGTGATCGACTGGAGGAGAAGGGCAGCCTAACTGAAGGGGCCTTGGCTCATTCTGGGAACCTGTG
 TCAAAAAGGAGTCCATGAAGACCATCAGCTGGATACCGAGGCTGGGGCCCCACTGTGGAACAAACCCAC
 AGCTTGCTCAGGATCCATCCCAGAATCAGCAGACATCAATCCAACGCACAGTTCAGAAGATGTGAAGCC
 AAAAACCTCCCGCTGGATAAAGCATTAAACATCAGATCGAGTCTCCAGTGAAGGCGGAAGTCTATA
 AGTGGAAAAGAGTGTGCTCTTCTGTGGGCTTCTTTGGGTAAAGGAGCTGCAATGATCATCGAGACCC
 TCAATCTATTTTACATCCAGTGTTCAGGTGTGGAATTTGTAAGGCCAGCTTGAGATGCAGTGTGAG
 TGGGACGGATGTTAGGATTCGAAATGGTCTCCTGAACTGTAATGATTGCTACATGCGATCCAGAAGTGCC
 GGGCAGCCTACAACATTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG226312 representing NM_001112718

Red=Cloning site Green=Tags(s)

MACPALGLEALQPLQPEPPPEPAFSEAQKWIEQVTGRSFGDKDFRTGLENGILLCELLNAIKPGLVKKIN
 RLPTPIAGLDNIILFLRGCKELGLKESQLFDPDSLQDTSNRVTVKSLDYSRKLKNVLVTIYWLGAANSC
 TSYSGTTLNLKEFEGLLAQMRKTDDDIESPKRSIRDSGYIDCWDSESRDSLSPRRHGRDDSFDSLDSFGS
 RSRQTPSPDVVLRGSSDGRGSDSESDLPHRKLDPVKKDDMSARRTSHGEPKSAVPFNQYLPNKSNTAYV
 PAPLRKKAEREEYRKSWSSTATSPLGGERPFRYPRTVSDDAESTSMFDMRCEEEAAVQPHSRARQEQL
 QLINNQLREEDDKWQDDLARWKSRRRSVSQDLIKKEEERKKMEKLLAGEDGTSERRRSIKTYREIVQEKE
 RRERELHEAYKNARSQEEAEGILQYIERFTISEAVLERLEMPKILERSHSTEPNLSSFLNDPNPMKYLR
 QQSLPPPKFTATVETTIARASVLDTSMSAGSGSPSKTVPKAVPMLTPKPYSQPKNSQDVLKTFKVDGKV
 SVNGETVHREEEKERECPVAPAHSLTKSQMFEGVARVHGSPLLELKQDNGSIEINIKKPNVSPQELAATT
 EKTEPNSQEDKNDGGKSRKGNIELASSEPHFTTTVTRCSPTVAFVEFPSPQLKNDVSEEKDQKPPENE
 MSGKVELVLSQKVVKPKSPEPEATLTFPFLDKMPEANQLHLPLNSQVDSPEKSPVMTPFKFAWDPE
 EERRRQEKWQEQERLLQERYQKEQDKLKEWEKAQKEVEEEERRYYEERKIIEDTVVPFTVSSSSADQ
 LSTSSMTEGSGTMNKIDLGNQCDEKQDRRWKKSFGQDSDLLKLTRESDRLEEKGLTEGALAHSGNPV
 SKGVHEDHQLDTEAGAPHCSTNPQLAQDPSONQQTSNPHTSSEDEVKPKTLPLDKSINHQIESPSERRKSI
 SGKKLCSGCLPLGKAAMIETLNLVYFHIQCFRCGICKGQLGDAVSGTDVIRNGLLNCNDCYMRSRSA
 GQPTTL

TRTRPLE - GFP Tag - V

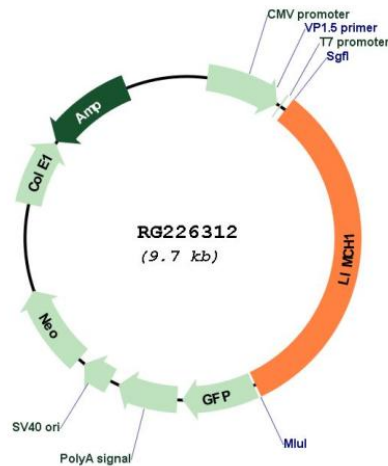
Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



ACCN: NM_001112718

ORF Size: 3168 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_001112718.4</u>
RefSeq Size:	6101 bp
RefSeq ORF:	3171 bp
Locus ID:	22998
UniProt ID:	<u>Q9UPQ0</u>
Cytogenetics:	4p13
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]