

Product datasheet for **RG226419**

LAMA3 (NM_001127718) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LAMA3 (NM_001127718) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LAMA3
Synonyms:	BM600; E170; LAMNA; LOCS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG226419 representing NM_001127718 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCTCCAGCAGTGAGGCGGTGAGCCTGCAGCATGGGATGGCTGTGGATCTTTGGGGCAGCCCTGGGGC
AGTGTCTGGGCTACAGTTCACAGCAGCAAAGGGTGCCATTTCTTCAGCCTCCCGGTCAAAGTCAACTGCA
AGCGAGTTATGTGGAGTTTAGACCCAGCCAGGGTTGTAGCCCTGGATACTATCGGGATCATAAAGGCTTG
TATACCGGACGGTGTGTTCCCTGCAATTGCAACGGACATTCAAAATCAATGCCAGGATGGCTCAGGCATAT
GTGTTAACTGTCAGCACAAACACCGCGGGAGAGCACTGTGAACGCTGCCAGGAGGGCTACTATGGCAACGC
CGTCCACGGATCCTGCAGGGCCTGCCCATGTCTCACACTAACAGCTTGGCCACTGGCTGTGTGGTGAAT
GGGGGAGACGTGCGGTGCTCCTGCAAAGCTGGGTACACAGGAACACAGTGTGAAAGGTGTGCACCGGGAT
ATTTCCGGGAATCCCCAGAAATTCGGAGGTAGCTGCCAACCATGCAGTTGTAACAGCAATGGCCAGCTGGG
CAGCTGTCATCCCTGACTGGAGACTGCATAAACCAAGAACCAGGATAGCAGCCCTGCAGAAGAATGT
GATGATTGCGACAGCTGTGTGATGACCCCTCTGAACGACCTGGCCACCATGGCGGAGCAGCTCCGCTGG
TCAAGTCTCAGCTGCAGGGCCTGAGTGCCAGCGCAGGGCTTCTGGAGCAGATGAGGCACATGGAGACCCA
GGCCTGGAAAGAGAACTGACTGATTTGAATCAAGAATTTGAGACTTTGCAAGAAAAGGCTCAAGTAAAT
CCAGAAAAGCACAAACATTAACAACAATGTTAATCGGGCAACACAAAGCGCAAAAAGAACTGGATGTGAA
GATTAATAATGTCATCCGGAATGTGCACATGCTGAACCGGATAAAGACCTGGCAGAAAACCCACAGGGG
GAGAACAATGGGCTTGCTAACAGTATCCGGATTCTTTAAATGAATACGAAGCCAAACTCAGTGACCTTC
GTGCTCGGCTGCAGGAGGAGCTGCCAAGCCAAGCAGGCAAAATGGCTTGAACCAAGAAAACGAGAGAGC
TTTGGGAGCCATTCAGAGACAAGTGAAGAAAATAAATTCCTGCAGAGTGATTTACCAAGTATCTAAC
ACTGCAGACTCATCTTTGTTGCAAACCAATTGCGCTGCAGCTGATGGAGAAAAGCCAGAAGGAATATG
AAAAATTAGCTGCCAGTTTAAATGAAGCAAGACAAGAATAAGTGACAAAGTAAGAGAATTTCCAGATC
TGCTGGCAAAACATCCCTTGTGGAGGAGGCAGAAAAGCACGCGCGGTCTTACAAGAGCTGGCAAAGCAG



[View online »](#)

CTGGAAGAGATCAAGAGAAACGCCAGCGGGATGAGCTGGTGCCTGTGCTGTGGATGCCGCCACCGCT
 ACGAGAACATCCTCAATGCCATCAAAGCGGCCGAGGACGACGCCAACAGGGCTGCCAGTGCATCTGAATC
 TGCCCTCCAGACAGTGATAAAGGAAGATCTGCCAAGAAAAGCTAAAACCTGAGTTCCAACAGTGATAAA
 CTGTTAAATGAAGCAAGATGACACAAAAGAAGCTAAAGCAAGAAGTCAGTCCAGCTCTCAACAACCTAC
 AGCAAACCTGAATTTGTGACAGTTCAGAAAGAAGTGATAGACACCAATCTCACAACCTCCGAGATGG
 TCTTCATGGGATACAGAGAGGTGATATTGATGCTATGATCAGTAGTGCAAAGAGCATGGTCAGAAAGGCC
 AACGACATCACAGATGAGGTTCTGGATGGGCTCAACCCCATCCAGACAGATGTGGAAAGAATTAAGGACA
 CCTATGGGAGGACACAGAACGAAGACTTCAAAAAGGCTCTGACTGATGCAGATAACTCGGTGAATAAGTT
 AACCAACAAACTACCTGATCTTTGGCGCAAGATTGAAAGTATCAACCAACAGCTGTTGCCCTTGGAAAC
 ATCTCTGACAACATGGACAGAATACGAGAACTAATTCAGCAGGCCAGAGATGCTGCCAGTAAAGTTGCTG
 TCCCCATGAGGTTCAATGGTAAATCTGGAGTCGAAGTCCGACTGCCAAATGACCTGGAAGATTTGAAAGG
 ATATACATCTCTGCTTGTCTTCCAAAGGCCAACTCAAGAGAAAATGGGGTACTGAGAATATGTTT
 GTGATGTACCTTGAAATAAAGATGCCTCCCGGACTACATCGGCATGGCAGTTGTGGATGGCCAGCTCA
 CCTGTGTCTACAACCTGGGGACCGTGAGGCTGAACTCCAAGTGGACCAGATCTTGACCAAGAGTGAGAC
 TAAGGAGGCAGTTATGGATCGGGTGAATTTTCAGAGAATTTATCAGTTTGAAGGCTTAATTACACCAA
 GGAGCCATCCAGTAAACCAGAAACACCCGGAGTCTATGACATGGATGGTAGAAATAGCAATACACTCC
 TTAATTTGGATCCTGAAAATGTTGATTTTTATGTTGGAGGTTACCCACCTGATTTTAAACTTCCCAGTCG
 ACTAAGTTTCCCTCCATACAAAGGTTGATTGAATTAGATGACCTCAATGAAAATGTTCTGAGCTTGAC
 AACTTCAAAAAACATTCATCTCAACCAACTGAAGTGGAGCCTGTAGAAGGAGGAAGGAAGAGTCAG
 ACAAAAATTTTTGAAGGTACGGGCTATGCTCGAGTTCCAACCTCAACCACATGCTCCCATCCCAACCTT
 TGGACAGACAATTCAGACCACCGTGGATAGAGGCTTGTGTTCTTTCAGAAAACGGGGATCGCTTCATA
 TCTCTAAATATAGAAGATGGCAAGCTCATGGTGAATACAACCTGAATTCAGAGCTACAAAAGAGAGAG
 GAGTTGGAGACGCCATAAAACAACCGCAGAGACCTTCGATTCAGATCAAAATTTGGAAAACCTCAAAAGCG
 TATGTGGATAAAATGTGGAGCTTCAAAACACTATAATTGATGGTGAAGTATTTGATTTTCAGCACATATTAT
 CTGGGAGGAATCCAATTGCAATCAGGGAAGATTTAACATTTCTACGCCTGCTTCCGAGGCTGCATGA
 AAAATTTGAAGAAAACAGTGGTGTGTTAGATTGAATGATACTGTGGGAGTAACCAAAAAGTGTCTCGGA
 AGACTGGAAGCTTGTGCGATCTGCCTCATTCTCCAGAGGAGGACAATTGAGTTTCACTGATTTGGCTTA
 CCACCTACTGACCACCTCCAGGCCTCATTGGATTTTCAGACCTTCAACCCAGTGGCATAATTATTAGATC
 ATCAGACATGGACAAGGAACCTGCAGGTCCTGGAAGATGGTTACATTGAATTGAGCACCAGCGATAG
 CGGCAGCCCAATTTTTAAATCTCCACAGACGTATATGGATGGTTACTGCATTATGTATCTGTAATAAGC
 GACAACCTGACTACGGCTTCTCATCGATGACCAGCTTCTGAGAAATAGCAAAAAGGCTAAAACACATTT
 CAAGTTCCCGGAGTCTCTGCGTCTGGCGGGAGCAATTTGAGGGTGTATTAGCAATGTTTTGTCCA
 GAGGTTATCACTGAGTCCTGAAGTCTAGATTTGACCAGTAACTCTCTCAAGAGAGATGTGTCCCTGGGA
 GGCTGCAGTTTAAACAAACCACCTTTTCTAATGTTGCTTAAAGGTTCTACCAGGTTTAAACAAGACCAAGA
 CTTTTCGTATCAACCAGCTGTTGCAGGACACACCAGTGGCCTCCCAAGGAGCGTGAAGGTGTGGCAAGA
 TGCTTGCTCACCCTTCCAAGACCCAGGCCAATCATGGAGCCCTCCAGTTTGGGGACATTTCCACCAGC
 CACTTGCTATTCAAGCTTCTCAGGAGCTGCTGAAACCCAGGTCACAGTTTGCTGTGGACATGCAGACAA
 CATCCTCCAGAGGACTGGTGTTCACACGGGCACTAAGAACTCTTTATGGCTCTTTATCTTTCAAAGG
 ACGTCTGGTCTTTGCACTGGGGACAGATGGGAAAAAATTGAGGATCAAAAAGCAAGGAGAAATGCAATGAT
 GGGAAATGGCACACGGTGGTGTGGCCATGATGGGAAAAAGGGCGCTTGGTTGTGGATGGACTGAGGG
 CCCGGGAGGGAAGTTGCTGGAACCTCCACCATCAGCATCAGAGCGCCAGTTTACCTGGGATCACCTCC
 ATCAGGGAACCAAGAGCCTCCCAACAACAGCTTTGTGGGATGCTGAAAGAACTTTGAGTGGATTCA
 AAACCCTGTATACCCCTTCTTCAAGCTTCCGGGTGTCTTCTGCTTGGGTGGTCTTTGGAGAAAGGCA
 TTTATTTCTCTGAAGAAGGAGGTGATGCTGCTTGGCTCACTCTGTATTGTTGGGGCCAGAAATTAAGCT
 TGTTTTCAGCATCCGCCAAGAAGTCTCACTGGGATCCTAATACACATCGGAAGTCAGCCCGGAAGCAC
 TTATGTGTTTACCTGGAGGCAGGAAAGTACGGCCTCTATGGACAGTGGGCAGGTGGGACCTCAACGT
 CGGTCACACCAAAGCAGTCTCTGTGTGATGGACAGTGGCACTCGTGGCAGTCACCATAAAACAACACAT
 CCTGCACCTGGAAGTGGACACAGACAGTAGCTACACAGCTGGACAGATCCCTTCCACCTGCCAGCACT
 CAAGAGCCACTACACCTTGGAGGTGCTCCAGCCAAATTTGACGACACTGAGGATCCCTGTGTGGAATCAT
 TCTTTGGCTGTCTGAGGAATATTCATGTCAATCACATCCCTGTCCCTGTCACTGAAGCCTTGAAGTCCA
 GGGCCTGTCACTGAATGTTGCTGCTGACCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG226419 representing NM_001127718
 Red=Cloning site Green=Tags(s)

MPPAVRRSACSMGWLWIFGAALGQCLGYSSQQQRPVFLQPPGQSLLQASYVEFRPSQGCSPGYRDHKG
 YTGRCVPCNCGHNSQCQDQSGICVNCQHNTAGEHCERCQEGYYGNAVHGSCRACPCPHTNSFATGCVVN
 GGDVRCSCKAGYGTQCERCAPGYFGNPQKFGGSCQPCSCNSNGQLGSCHPLTGDCINQEPKDSSPAEE
 DDCDSCVMTLLNDLATMGEQLRLVKSLLQGLSASAGLLEQMRHMETQAKDLRNQLLNYSASISNHGSKIE
 GLERELTDLNQEFETLQEKAVNSRKAQTLNANNVNRATQSAKELDVKIKNVIRNVHMLNRIRTWQKTHQG
 ENNGLANSIRDLSNEYEAKLSDLRARLQEAQAQAKQANGLNGENERALGAIQRQVKEINLSQSDFTKYL
 TADSSLLQTNIALQLMEKSQKEYEKLAASLNEARQELSDKVREL SRSAGKTSLVEAEKHARSLQELAKQ
 LEEIKRNASGDELVRCVDAATAYENILNAIKAEDAANRAASASESALQTVIKEDLPRKAKTSSNSDK
 LLNEAKMTQKLLKQEVSPALNNLQQTLLNI VTVQKEVIDTNLTTLRDGLHGIQRGDIDAMISSAKSMVRKA
 NDITDEVLDGLNPIQTDVERIKDITYGRTONEDFKKALTDADNSVNKLTKLPLDLWRKIESINQQLLPLGN
 ISDNMDRIREL IQQARDAASKVAVPMRFNGKSGVEVRLPNDLEDLKGYSLSLFLQRPNSRENGGTENMF
 VMYLGNK DASRDYIGMAVVDGQLTCVYNLGDREAELQVDQILTKSETKEAVMDRVKFRIRYQFARLNYTK
 GATSSKPETPGVYDMDGRNSNTLLNLDPENNVFYVGGYPPDFKLP SRLFPPYKGCIELDDL NENVLSLY
 NFKKTFNLNTEVEPCRRRKEESDKNYFEGTGYARVPTQPHAPIPTFGQTIQTTVDRGLLFFAENGDRFI
 SLNIEDGKLMVRYKL NSELPKERGVGDAINNGRDHSIQIKIGKLQKRMWINVDVQNTIIDGEVDFDSTYY
 LGGIPIAIRERFNISTPAFRGCMKNLKKTSGVVRLNDTVGVTKKCEDWKL VRSASF SRGGQLSFTDLGL
 PPTDHLQASFQTFQPSGILLDHQWTRNLQVTLEDGYIELSTSDSGSPIFKSPQTYMDGLLHYVSVIS
 DNSGLRLLIDDQLLRNSKRLKHISSSRQSLRLGGSNFEGCISNVFVQRLSLSPEVLDLTSNLSLRDVS LG
 GC SLNKPPFLMLLKGSTRFNKTKTFRINQLLQDTPVASPRSVKVVQDAC SPLPKTQANHGALQFGDIPTS
 HLLFKLPQELLKPRSQFAVDMQTTSSRGLVFHTGTKNFMYL SKGRLVFALGTGDKKLRIKSKEKEND
 GKWHTVVFVGHGGEKGRLLVVDGLRAREGSLPGNSTISIRAPVYLGSPSGKPKSLPTNSFVGLKNFQLDS
 KPLYTPSSSFGVSSCLGGPLEKGIYFSEEGHVLAHSVLLGPEFKLVFSIRPRSLTGILIHIGSQPGKH
 LCVYLEAGKVTASMSDGGAGTSTSVTPKQSLCDGQWHSVAVTIKQHILHLELDTDSSYTAGQIPFPAST
 QEPLHLGGAPANLTTLRIPVWKSFFGCLRNIHVNHIPVPVTEALEVQGPVSLNGCPDQ

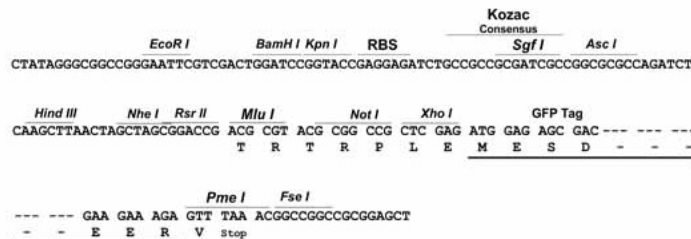
TRTRPLE - GFP Tag - V

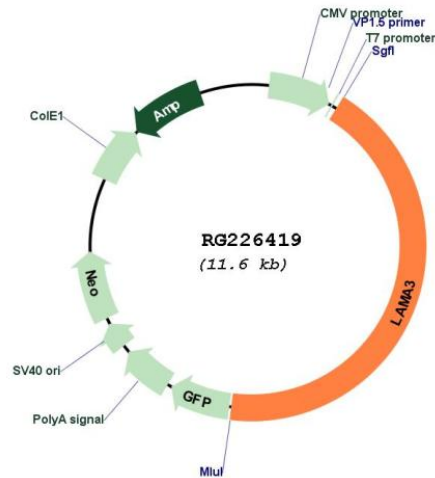
Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_001127718

ORF Size: 5004 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_001127718.1](#), [NP_001121190.1](#)

RefSeq Size: 5455 bp

RefSeq ORF: 5007 bp

Locus ID: 3909

UniProt ID:	<u>Q16787</u>
Cytogenetics:	18q11.2
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	ECM-receptor interaction, Focal adhesion, Pathways in cancer, Small cell lung cancer
Gene Summary:	<p>The protein encoded by this gene belongs to the laminin family of secreted molecules. Laminins are heterotrimeric molecules that consist of alpha, beta, and gamma subunits that assemble through a coiled-coil domain. Laminins are essential for formation and function of the basement membrane and have additional functions in regulating cell migration and mechanical signal transduction. This gene encodes an alpha subunit and is responsive to several epithelial-mesenchymal regulators including keratinocyte growth factor, epidermal growth factor and insulin-like growth factor. Mutations in this gene have been identified as the cause of Herlitz type junctional epidermolysis bullosa and laryngoonychocutaneous syndrome. Alternative splicing and alternative promoter usage result in multiple transcript variants. [provided by RefSeq, Dec 2014]</p>