

Product datasheet for **RG212085**

Laminin (LAMA1) (NM_005559) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Laminin (LAMA1) (NM_005559) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LAMA1
Synonyms:	LAMA; PTBHS; S-LAM-alpha
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG212085 ORF sequence, codon optimized . Due to the complexity of NM_005559, the ORF clone is codon optimized for mammalian Expression. The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >RG212085 representing NM_005559
 Red=Cloning site Green=Tags(s)

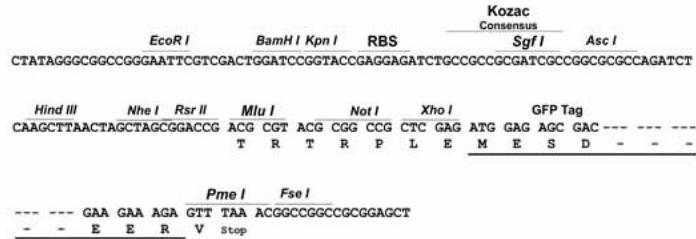
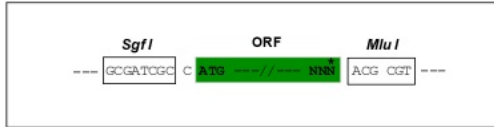
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TRTRPLE - GFP Tag - V

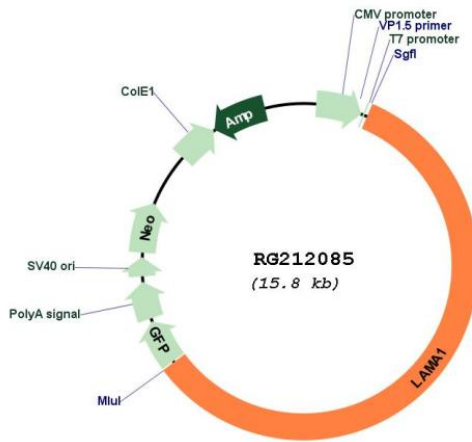
Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_005559
 ORF Size: 9225 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_005559.2](#), [NP_005550.2](#)

RefSeq Size: 9642 bp

RefSeq ORF: 9228 bp

Locus ID: 284217

UniProt ID: [P25391](#)

Cytogenetics: 18p11.31

Protein Families: Druggable Genome, ES Cell Differentiation/IPS

Protein Pathways: ECM-receptor interaction, Focal adhesion, Pathways in cancer, Small cell lung cancer

Gene Summary: This gene encodes one of the alpha 1 subunits of laminin. The laminins are a family of extracellular matrix glycoproteins that have a heterotrimeric structure consisting of an alpha, beta and gamma chain. These proteins make up a major component of the basement membrane and have been implicated in a wide variety of biological processes including cell adhesion, differentiation, migration, signaling, neurite outgrowth and metastasis. Mutations in this gene may be associated with Poretti-Boltshauser syndrome. [provided by RefSeq, Sep 2014]