

## Product datasheet for **RG206132**

### **LARGE2 (NM\_152312) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	LARGE2 (NM_152312) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LARGE2
Synonyms:	GYLTL1B; PP5656
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>RG206132 representing NM\_152312  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGCTGCCCGAGGGCGCCCCGGGCGCTGGGGCGCCGCGCTGTTGCTGCTGCTGCTGCTGCTGGAT  
TCCTCCTGTTGCGGTGGGACCTGGGGTGTGAGCGCCGCAAGCCTGGCGGGCGAGCGGGGCCCGGGATG  
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TCCTGGTGTGCCGAGGCTTACCATCCATCTGCCACGCTCCAAGCCTGGACATCTCCCGCTCCG  
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CATGGGGCTGCTGCCCTCAAATACCTCCAGCCCTGCAGCAGCCCCAGAGCCCTGCCCGAGGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG206132 representing NM\_152312  
 Red=Cloning site Green=Tags(s)

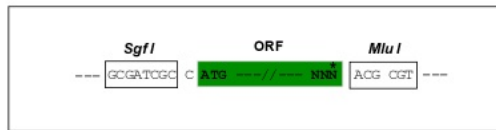
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 VVYREGPLYPVNQLRNVALAQUALTPYVFLSDIDFLPAYSLYDYL RASIEQLGLGSRKAALVVPFETLR  
 YRFSFPHSKVELLALLDAGTLYTFRYHEWPRGHAPTDYARWREAQAPYRVQWAANYEPYVVVPRDCPRYD  
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TRTRPLE - GFP Tag - V

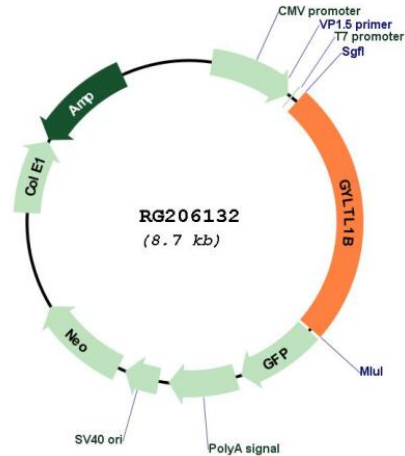
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



## Plasmid Map:



ACCN: NM\_152312

ORF Size: 2163 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\\_152312.3](#), [NP\\_689525.3](#)

RefSeq Size: 2539 bp

RefSeq ORF: 2166 bp

<b>Locus ID:</b>	120071
<b>UniProt ID:</b>	<a href="#">Q8N3Y3</a>
<b>Cytogenetics:</b>	11p11.2
<b>Protein Families:</b>	Transmembrane
<b>Gene Summary:</b>	<p>Bifunctional glycosyltransferase with both xylosyltransferase and beta-1,3-glucuronyltransferase activities involved in the biosynthesis of the phosphorylated O-mannosyl trisaccharide (N-acetylgalactosamine-beta-3-N-acetylglucosamine-beta-4-(phosphate-6-)mannose), a carbohydrate structure present in alpha-dystroglycan (DAG1). Phosphorylated O-mannosyl trisaccharid is required for binding laminin G-like domain-containing extracellular proteins with high affinity. Elongates the glucuronyl-beta-1,4-xylose-beta disaccharide primer structure by adding repeating units [-3-Xylose-alpha-1,3-GlcA-beta-1-] to produce a heteropolysaccharide. Has a higher activity toward alpha-dystroglycan than LARGE.[UniProtKB/Swiss-Prot Function]</p>