

Product datasheet for **RG239315**

LARGE2 (NM_001300722) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LARGE2 (NM_001300722) 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)



[View online »](#)

ORF Nucleotide Sequence:

>RG239315 representing NM_001300722.
 Blue=ORF Red=Cloning site Green=Tag(s)

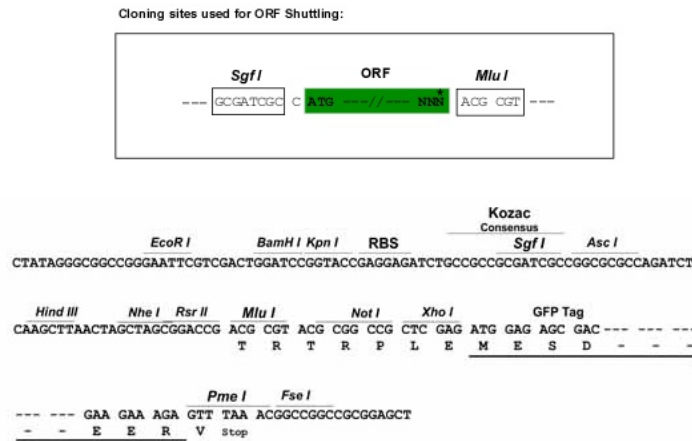
```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCACGATCGCC
ATGCTGCCCCGAGGGCGCCCCGGGCGCTGGGGCCCGCGCGCTGTTGCTGCTGCTGCTGCTCGGA
TTCTCCTGTTCGACGGGAGGCTGCGGAGAGCCCGCCCTCGACGGAGACCCGGGGCCGGCCCCGGG
GACCACAACCGCTCCGACTGCGGCCCGCAGCCCGCCCGCCCAAGTGCAGACTCTTGATGTGGCC
ATCGTGTGTGCGGGGCATAACTCCAGCCGAGACGTCATCACCCCTGGTGAAGTCCATGCTCTTCTACAGG
AAAAATCCACTGCACCTCCACTTGGTGACTGACGCCGTGGCCAGAAACATCCTGGAGACGCTCTCCAC
ACATGGATGGTGCCTGCTGTCCGTGTCAGCTTTTATCATGCCAGCAGCTCAAGCCCCAGGTCTCCTGG
ATCCCCAACAAAGCACTACTCCGGCCTCTATGGGCTAATGAAGCTGGTGTGCCAGTGCCTTGCCTGCT
GAGCTGGCCCGCTCATTGTCTGGACACGGATGTCACCTTCGCCTCTGACATCTCGGAGCTCTGGGCC
CTCTTTGCTCACTTTTCTGACACGCAGGCGATCGGTCTTGTGGAGAACCAGAGTGACTGGTACCTGGGC
AACCTCTGGAAGAACCACAGGCCCTGGCCTGCCTTGGGCCGGGGATTTAACACAGGTGTGATCCTGCTG
CGCTGGACCCGGCTCCGGCAGGCTGGCTGGGAGCAGATGTGGAGGCTGACAGCCAGGCGGGAGCTCCTT
AGCCTGCCTGCCACCTCACTGGCTGACCAGGACATCTCAACGCTGTGATCAAGGAGCACCCGGGGCTA
GTGCAGCGTCTGCCTTGTGTCTGGAATGTGCAGCTGTCAGATCACACACTGGCCGAGCGCTGCTACTCT
GAGGCGTCTGACCTCAAGGTGATCCACTGGAACTCACAAAGAAGCTTCGGTGAAGAACAAGCATGTG
GAATTCCTCCGCAATTTCTACCTGACCTTCTGGAGTACGATGGGAACCTGCTGCGGAGAGAGCTCTTT
GTGTGCCCCAGCCAGCCCCACCTGGTGCTGAGCAGTTGCAGCAGGCCCTGGCACAACTGGACGAGGAA
GACCCCTGCTTTGAGTTCCGGCAGCAGCAGCTCACTGTGCACCGTGTGCATGTCACTTTCCTGCCCAT
GAACCGCCACCCCGGCCTCACGATGTCACCTTGTGGCCAGCTGTCCATGGACCGGCTGCAGATG
TTGGAAGCCCTGTGCAGGCACTGGCCTGGCCCATGAGCCTGGCCTTGTACCTGACAGACGAGAAGCT
CAGCAGTTCTGCATTTCTGTCGAGGCTCACCAGTGCTTGTGCCGGCAGGACGTGGCCTACCATGTG
GTGTACCGTGAGGGGCCCTATACCCCGTCAACCAGCTTCGCAACGTGGCCTTGGCCAGGCCCTCACG
CCTTACGTCTTCTCAGTGACATTGACTTCTGCCTGCCTATTCTCTCTACGACTACCTCAGGGCCTCC
ATTGAGCAGCTGGGGCTGGGCAGCCGGCGCAAGGCAGCACTGGTGGTGGCCGATTCGAGACCTGCGC
TACCGCTCAGCTTCCCCATTCCAAGGTGGAGCTGTTGGCCTTGTGGATGCGGGCACTCTCTACACC
TTCAGGTACCACGAGTGGCCCCGAGGCCACGCACCCACAGACTATGCCCGCTGGCGGGAGGCTCAGGCC
CCGTACCGTGTGCAATGGGCGGCCAACTATGAACCTACGTGGTGGTGGCCAGGACTGTCCCCGCTAT
GATCCTCGCTTTGTGGGCTTCGGCTGGAACAAAGTGGCCACATTGTGGAGCTGGATGCCAGGAATAT
GAGCTCCTGGTGTGCCCGAGGCCTTACCATCCATCTGCCCCACGCTCCAAGCCTGGACATCTCCCGC
TTCCGCTCCAGCCCCACCTATCGTGACTGCCTCCAGGCCCTCAAGGACGAATTCACCAGGACTTGTCC
CGCCACCATGGGGCTGCTGCCCTCAAATACCTCCAGCCCTGCAGCAGCCCCAGAGCCCTGCCCGAGGC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG239315
 Blue=ORF Red=Cloning site Green=Tag(s)

MLPRGRPRALGAAALLLLLLLGLLFDGRLRRAAALDGDGAGPGDHNRSDCGPQPPPPKCELLHVA
 IVCAGHNSRDVITLVKSMFLYRKNPLHLHLVTDVARNILETLFHTWMVPAVRVSFYHADQLKPQVSW
 IPNKHYSGLYGLMKLVLPSPALPAELARVIVLDTDVTFASDISELWALFAHFSDTQAIGLVENQSDWYLG
 NLWKNHRPWPALGRGFNTGVILLRLDRLRQAGWEQMWRLTARRELLSLPATSLADQDIFNAVIKEHPGL
 VQRLPCVWNVQLSDHTLAERCYSEASDLKVIHWNSPKLRVKNKHVEFFRNLYLTFLEYDGNLLRREL
 VCPSQPPPGAEQLQQALAQLEEDPCFEFRQQQLTVHRVHVTFLPHEPPPPRPHDVTLVAQLSMDRLQM
 LEALCRHWPGPMSLALYLTDAEAQQFLHFVEASPVLAARQDVAYHVYREGPLYPNQLRVALAQALT
 PYYFLSDIDFLPAYSLDYLRASIEQLGLGSRRAALVVPAFETLRYRFSFPHSKVELLALLDAGTLYT
 FRYHEWPRGHAPTAYRWREAQAPYRVQWAANYEPYVVVPRDCPRYDPRFVGFQWKNVAHIVELDAQEY
 ELLVLPEAFTIHLPHAPSLDISRFRSSPTYRDCLQALKDEFHQDLSRHHGAAALKYLPALQPPQSPARG
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPISILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001300722

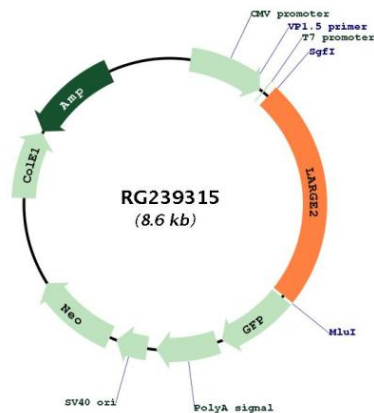
ORF Size: 2070 bp

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).
RefSeq:	NM_001300722.2
RefSeq Size:	2473 bp
RefSeq ORF:	2073 bp
Locus ID:	120071
UniProt ID:	Q8N3Y3
Cytogenetics:	11p11.2
Protein Families:	Transmembrane
MW:	79.2 kDa
Gene Summary:	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]

Product images:



Circular map for RG239315