

Product datasheet for **RC239412**

LARGE2 (NM_001300721) Human Tagged ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | LARGE2 (NM_001300721) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | LARGE2 |
| Synonyms: | GYLTL1B; PP5656 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

ORF Nucleotide
Sequence:

>RC239412 representing NM_001300721
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCTGCCCCGAGGGCGCCCCGGGCGCTGGGGCGCCCGCGCTGTTGCTGCTGCTGCTGCTGCTGGAT
TCCTCCTGTTTCGGTGGGACCTGGGGTGTGAGCGCCGCAAGCCTGGCGGGCGAGCGGGGCCCGGGATG
CTTCCCCGGCCCGCTCATGCCACGTGTCCCCCAGACGGGAGGCTGCGGAGAGCCGCCGCCCTCGACGGA
GACCCGGGGGCCGGCCCGGGGACCACAACCGCTCCGACTGCGGCCCGCAGCCGCCCGCCGCCCAAGT
GCGAGCTCTTGATGTGGCCATCGTGTGTGCGGGGCATAACTCCAGCCGAGACGTATCACCTGGTGAA
GTCCATGCTCTTACAGGAAAAATCCACTGCACCTCCACTTGGTACTGACGCCGTGGCCAGAAACATC
CTGGAGACGCTCTCCACACATGGATGGTGCCTGCTGTCCGTGTCAGCTTTATCATGCCGACCAGCTCA
AGCCCCAGGTCTCCTGGATCCCCAACAAGCACTACTCCGGCCTCTATGGGCTAATGAAGTGGTGTGCC
CAGTGCCTTGCCGCTGAGCTGGCCCGCTCATTGTCTGGACACGGATGTCACCTTCGCCTCTGACATC
TCGGAGCTCTGGGCCCTCTTTGCTCACTTTTCTGACACGACGGGATCGGTCTTGTGGAGAACCAGAGTG
ACTGGTACCTGGGCAACCTCTGGAAGAACCACAGGCCCTGGCCTGCCTGGGCGGGGATTTAACACAGG
TGTGATCCTGCTGCGGCTGGACCGCTCCGGCAGGCTGGCTGGGAGCAGATGTGGAGGCTGACAGCCAGG
CGGGAGCTCCTTAGCCTGCCTGCCACCTCACTGGCTGACCAGGACATCTTCAACGCTGTGATCAAGGAGC
ACCCGGGGCTAGTGCAGCGTCTGCCTTGTGTCTGGAATGTGCAGCTGTGAGATCACACACTGGCCGAGCG
CTGCTACTCTGAGGCGTCTGACCTCAAGGTGATCCACTGGAACACCAAAGAAGCTTCGGGTGAAGAAC
AAGCATGTGAATTCTTCGCAATTTCTACCTGACCTTCTGGAGTACGATGGAACTGCTGCGGAGAG
AGCTCTTTGTGTGCCCGAGCCCGCCACCTGGTGTGCTGAGCAGTTGACGAGCCCTGGCACAATGGA
CGAGGAAGACCCCTGCTTTGAGTTCGGCAGCAGCAGCTCACTGTGACCGTGTGATGTCACCTTTCCTG
CCCCATGAACCGCACCCCGCCGCTCACGATGTCACCTTGTGGCCAGCTGTCCATGGACCGGCTGC
AGATGTTGGAAGCCCTGTGACGCACTGGCCTGGCCCATGAGCCTGGCCTTGTACCTGACAGACGACAGA
AGCTCAGCAGTTCCTGCATTTTCGTGAGGCTCACCAAGTCTGCTGCCCGCAGGACGTGGCCTACCAT
GTGGTGTACCGTGAAGGGCCCTATACCCCGTCAACCAGCTTCGCAACGTGGCCTTGCCCGAGGCCCTCA
CGCCTTACGCTCTCCTCAGTGACATTGACTTCTGCCTGCCTATTCTCTACGACTACCTAGGGCCTC
CATTGAGCAGCTGGGGCTGGGCAGCCGGCAGGCAAGGCAAGCAAGTGGTGGTGGCCGATTTGAGACCCTGCG
TACCGCTTCAAGTTCGCCATTCCAAGGTGGAGCTGTTGGCCTTGTGGATGCGGGCACTCTTACACCT
TCAGGTACCACGAGTGGCCCCGAGGCCACGCACCCACAGACTATGCCCGTGGCGGGAGGCTCAGGCCCC
GTACCGTGTGCAATGGGCGGCCAACTATGAACCTACGTGGTGGTGGCCACGAGACTGTCCCCGCTATGAT
CCTCGCTTTGTGGCTTCGGCTGGAACAAAGTGGCCACATTGTGGAGCTGGATGCCAGGAATATGAGC
TCCTGGTGTGCCGAGGCTTACCATCCATCTGCCACGCTCCAAGCCTGGACATCTCCCGCTCCG
CTCCAGCCCCACCTATCGTACTGCCTCCAGGCCCTCAAGGACGAATTCACCAGGACTTGTCCCGCCAC
CATGGGGCTGTGCCCTCAAATACCTCCAGCCCTGCAGCAGCCCGAGGCCCTGCCCGAGGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239412 representing NM_001300721
 Red=Cloning site Green=Tags(s)

MLPRGRPRALGAAALLLLLLLGGFLFGGDLGCERRKPGGRAGAPGCFPGPLMPRVPPDGRLLRAAALDGD
 DPGAGPGDHNRSDCGPQPPPPKCELLHVAIVCAGHNSSRDVITLVKSMLFYRKNPLHLHLVTDVARNI
 LETLFTHTWMPAVRVSFYHADQLKPQVSWIPNKHYSGLYGLMKLVLPALPAELARVIVLDTDVTFASDI
 SELWALFAHFSDTQAIIGLVENQSDWYLGNLWKNHRPWPALGRGFNTGVILLRLDRLRQAGWEQMWRLTAR
 RELLSLPATSLADQDIFNAVIKEHPGLVQRLPCVWNVQLSDHTLAERCYSEASDLKVIHWNSPKKLRVKN
 KHVEFFRNFYLTFLFYDGNLLRRELFVCPSPQPPGAEQLQQAALQALDEEDPCFEFRQQQLTVHRVHVTF
 PHEPPPPRPHDVTVAQLSMDRLQMLEALCRHWPGPMSLALYLTDAEAQQFLHFVEASPVLAARQDVAYH
 VVYREGPLYPVNQLRNVALAQUALTPYVFLSDIDFLPAYSLYDYLRAIEQLGLGSRKAALVVPFETLR
 YRFSFPHSKVELLALLDAGTLYTFRYHEWPRGHAPTDYARWREAQAPYRVQWAANYEPYVVVPRDCPRYD
 PRFVGFGWNVKVAHIVELDAQEYELLVLEAFTIHLPHAPSLDISFRSSPTYRDCLQALKDEFHQDLSRH
 HGAAALKYLPALQQPQSPARG

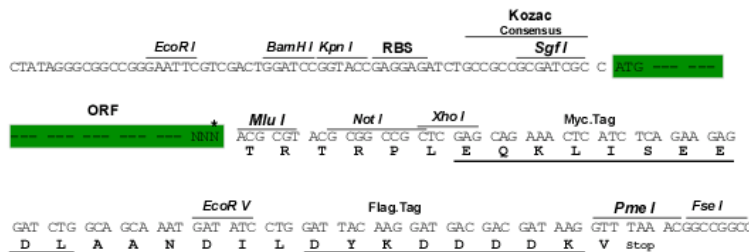
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4271_c08.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001300721

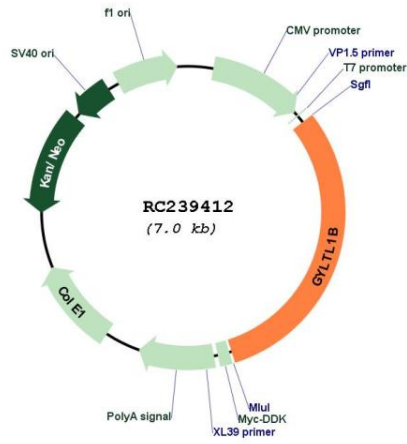
ORF Size: 2163 bp

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.

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| 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_001300721.1, NP_001287650.1</u> |
| RefSeq Size: | 2546 bp |
| RefSeq ORF: | 2166 bp |
| Locus ID: | 120071 |
| UniProt ID: | <u>Q8N3Y3</u> |
| Cytogenetics: | 11p11.2 |
| Protein Families: | Transmembrane |
| MW: | 81.8 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 RC239412