

Product datasheet for **RR205806**

Large2 (NM_199107) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Large2 (NM_199107) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Large2
Synonyms:	Gyltl1b
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RR205806 representing NM_199107
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGCCTCAGGGCGCCCCGGGCACTGGGGCGGCACTGCTGTTGTTGCTGCTGCTAGTGGTTGGCT
 TCTTCCTATTCGGCCGGGACCCGGAGTATGGACTAGGCACAACCGCCACCCTCGATGGAGACCCGTACGG
 GAGCCGCAACCGCTCCACCTCCAGCCTGCAGCTTCTACTGCCACCCAAGTGCAGATGTTGCATGTGGCC
 ATCGTGTGTGCGGGATACAACCTCCAGCCGAGAGATCATCACCTAATGAAGTCCGTGCTATTCTACAGGA
 AAAATCCGCTGCACCTCCACCTGATAACCGATGCCGTAGCCAGAAACATCCTGGAGACACTCTTCCGAAC
 ATGGATGGTACCAGCTGTGGTGCAGCTTCTATGATGCTGAAGAGCTCAAGCCCCTGGTTTCTGGATT
 CCCAACAAAGCACTACTCTGGCCTCTATGGGCTCATGAAGCTAGTACTTCCAGCGTCTGCTCTCAGCC
 TGGCCCGAGTCATTGTCCTGGACACCGATGTCACCTTCTCCTCTGACATTATGGAGCTCTGGGCACTCTT
 TGGTCATTTTTCTGACAAGCAGGTGGTCCGTCTTGTGGAGAACCAGAGCGACTGGTACCTGGGCAACCTC
 TGGAAGAACCATAGGCCCTGGCCTGCCTTGGGCGAGGGATTTAACACAGGTGTGATCCTGCTTTGGCTGG
 ACAGATTACAGCAGATTGGCTGGGAGCAGATGTGGAAGCTGACGGCCAAACGGGAGCTGCTTACTTTGAC
 TGCCACTTCTTGGCTGACCAGGACATCTTCAATGCCGTATCAAGGAGCATCCCAGCTGGTGCATCCC
 CTGCCCTGTGTCTGGAACGTGCAGCTGTGAGCCACACTCTGGCTGAGCGCTGCTACTTGGAAAGCAGCTG
 ACCTCAAAGTGATCCACTGGAATTCACCAAGAAGCTTCGAGTGAAGAACAAGCATGCAGAATCTTCCG
 TGATCTACACTTGACCTTCTGGGGTTGACGGGAAGCTACTGTGTAGAGAGCTCTTTGGTTGCCCAAC
 CAGTTCCTCCTGGGGTTGAGCAGTTGCAACAGGCCCTAGCACAGCTGGATGAGGAAGAGCCCTGCTTTG
 AGTTCGCCAACAGCAGCTCACTGTGCACCGGTACACATCACCTTTCTGTCTCACCAGCCGACCTCC
 TCGGCCTCACGATGTACCTTGGTGGCCAGCTCTCTATGGACCGCTGCAGATGCTGGAAGCCCTGTGC
 AGGCACTGGCGGGTCCCATGAGCCTGGCCTTGTACCTGACAGACGCAGAGGCTCAACAGTTCCTGCGTT
 TCGTGGAGACGTACCCAGTACTCTCTGCAAGGAAGGATGTGGCCTATCATGTAGTGTACCGGACGGCCC
 CCTCTACCCAGTCAACCAGCTCCGAAATGTGGCCTTGGCCAGGCTCTCACACCTACGTCTTCTCAGT
 GATATTGACTTCTTACCTGCCTACTCCCTCTATGACTACCTCAGGGCTCTATTGAGCAACTGGCGCTGG
 GCAGGGCGCAGAGGAAGGCTGCTTTGGTAGTGCCTGCATTTGAGACCCTGCACTACCGTTTCAGCTTCCC
 AAATCTAAGGCAGAGTTGTTGACCTTACTGGATGCTGGCTCTCTCCACACCTTTAGGTACCACGAGTGG
 CCACAGGGTCATGCATCCACAGACTATACCCGCTGGCGGGAAGCCAGGCACCATACCGAGTGCAGTGGT
 CAGCTGACTATGAGCCTTACGTGGTGGTACCCCGTACTGTCCCCGCTATGACCCTCGCTTTGTGGGCTT
 TGCTGGAACAAGGTGGCCCATATCATAGAGCTGGATGCTCAGGAATATGAATTCCTGGTACTTCTGAG
 GCCTTCTCTATCCACTTGCCCCATGCCCAAGTCTGGACATCTCCCGCTTCCGCTCCAGCCCCACCTACC
 GCGACTGCCTCCAGGCCCTCAAGGAGGAGTTCACCAGGACTTGTCTAGGCGCTATGGGTCTGCAGCCCT
 CAATACCTCACTGCCCTGCAGCAGTCCCGAAGCCGGCC

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR205806 representing NM_199107
 Red=Cloning site Green=Tags(s)

MLPRGRPRALGAALLLLLLLVGGFFLFRDPEYGLGTTATLDGDPYGSNRNSTSSLQLLLPPKCEMLHVA
 IVCAGYNSREIITLMKSVLFYRKNPLHLHLITDAVARNILETLFRTWMPAVVVSFYDAEELKPLVSWI
 PNKHYSGLYGLMKLVLPVLPVSLARVIVLDTDVTFSSDIMELWALFGHFSDKQVVLVENQSDWYLGNL
 WKNHRPWPALGRGFNTGVILLWLDRLQQIGWEQMWKLAKRELLTLTATSLADQDIFNAVIKEHPELVHP
 LPCVWNVQLSDHTLAERCYLEAADLKVIHWNSPKKLRVKNKHAFFRDHLHTFLGFDGKLLCRELFGCPN
 QFPPGVEQLQQAQLDEEPCFEFRQQQLTVHRVHITFLSHQPPPPRPHDVTLVAQLSMDRLQMLEALC
 RHWRGPMALYLTDAAEQQLRFVETSPVLSARKDVAYHVYRDGPLYPVNQLRNVALAQLTPYVFLS
 DIDFLPAYSLYDYLRSIEQLALGRRQRKAALVPAFETLHYRFSFPNSKAELLTLLDAGSLHTFRYHEW
 PQGHASTDYTRWREAQAPYRVQWSADYEPYVVVPRDCPRYDPRFVGFGWNVVAHIIELDQAQYEFVLP
 AFSIHLPHAPSLDISRFSSPTYRDCLQALKEEFHQDLRRYGSAAALKYLTALQQSRSA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_199107

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).

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_199107.1](#), [NP_954538.1](#)

RefSeq Size: 2455 bp

RefSeq ORF: 2073 bp

Locus ID: 311202

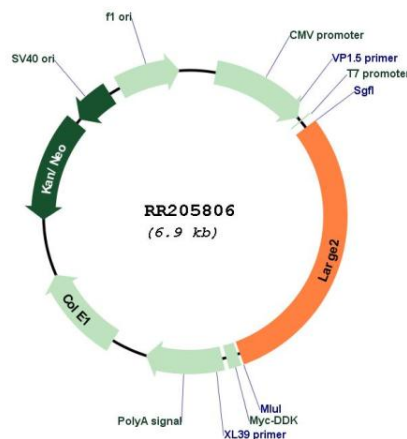
UniProt ID: [Q6P7A1](#)

Cytogenetics: 3q24

MW: 79.3 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 RR205806