

Product datasheet for **MR230899**

Large2 (NM_001290773) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Large2 (NM_001290773) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Large2
Synonyms:	5730485C17Rik; AI891893; Gylt11b; Largel; mKIAA4105
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR230899 representing NM_001290773
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGCCCCGAGGTCGCCCCCGGCAATGGGGCCGCCGTGCTGCTGCTGCTGTTGCTAGTGGTTG
 GCTTCTTCTGTTTCGGCCGGGACCCGGATTATGGACTGGGCACAACCTGCTACCCTCGATGAAGACCCGTA
 CAGGAGTCGCAACCTCTCCGCTCCAGCCCGCAGCTTCTACTGCCACCAAGTGCAGGTAATGTTGCAT
 GTGGCTATCGTGTGTGCGGGATACAACCTCCAGCCGAGAGATTATTACCCTAACGAAGTCCCTGCTATTCT
 ACAGGAAAAATCCGCTGCACCTCCACCTGATAACTGATGCCGTAGCCAGAAAACCTCGGAGACTCTT
 CCGAACATGGATGGTCCAGCGGTGGTGGTCAGCTTCTATGATGCGGAAGAAGTCAAGCCCTGGTCTCC
 TGGATCCCCAACAACTACTCTGGCCTCTATGGGCTAATGAAGCTAGTACTTCCAGCATCTGCCTC
 CCAGCCTGGCCCGAGTCATCGTCTGGATACCGACGTCACTTCTCTGACATTGTGGAGCTCTGGGC
 ACTCTTTGATCATTTTTCTGACAAGCAGGTGGTGGTCTCGTGGAGAACCAGAGCGACTGGTACCTGGGC
 AACCTCTGGAAGAACCATAGGCCCTGGCCTGCCTTGGGCAGGGGATTTAACACAGGTGTGATCCTGCTGT
 GGCTGGACAGGCTCCAGCAAACCTGGCTGGGAGCAGATGTGGAAGGTGACAGCCAAACGAGAGCTGCTCAC
 TCTGATGGCTACTTCCCTGGCTGACCAGGACATCTTCAATGCGGTGATCAAGGAGCACCCCATCTGGTG
 CACCCCTGCCCTGTGTCTGGAACGTGCAGCTGTGAGCCACACTCGGGCTGAGCGCTGCTACCTGGAAG
 CAGCTGACCTCAAAGTATCCACTGGAATTCACCAAAGAAGCTTCGAGTGAAGAACAAGCACGCAGAATT
 CTTCCGTAATCTGCACTTACCTTTCTGGGGTATGATGGGAAGCTACTGCGAAGAGAGCTCTTTGGATGC
 CCCAACAGTTCCTCCTGGGGCCGAGCAGTTGCAACAGGCCCTAACACAGCTGGATGAGGAAGAGCCCT
 GCTTTGAGTTCGCCAACAGCAGCTCACTGTGCACCCGGGTGCACATCACCTTCTGCCCCACAGCCGCC
 ACCTCCCCAGCCTCACGATGTCACCTTGGTGGCCCAACTCTCTATGGACCGGCTGCAGATGCTGGAAGCC
 CTGTGCAGGCACTGGCCAGGCCCATGAGCCTGGCCTTGTACCTGACAGATGAAGAGGCTCAACAATTTT
 TTCATTTTGTGGAACGTGCGCCAGTCTCTATGAGGAAGGATGTGGCCTACCATGTAGTGTACCGGGA
 CGGTCCACTCTATCCAGTCAACCAGCTCCGCAACGTGGCCTTGGCCAGGCTCTCACACCCTACGTCTT
 CTCAGTGATATTGACTTCTTACCTGCCTACTCCCTCTACGACTACCTCAGGGCTTCTATCGAGCAGCTGG
 AGCTGGACAGTCGGCGCAAGACTGCTTTGGTGGTGCCTGCATTTGAGACCCTACACTACCGGTTACGCTT
 CCCAACTCTAAGGCAGAGCTGTTGACGTTACTGGATGCCGCTCCCTTACACCTTTAGGTACCACGAG
 TGCCACAGGGTCACTCATCCACAGACTATTCCCGCTGGCGGGAAGCCAGGCACCATACAGTGTGCAGT
 GGTGAGCTGACTATGAACCTACGTGGTGGTACCCCGTACTGCCCCGTTATGATCCTCGCTTTGTGGG
 ATTTGGCTGGAACAAGGTGGCCACATCATAGAGTTGGATGCTCAGGAATATGAATTCCTGGTACTTCT
 GAGGCTTCTCTATCCACTTGGCCACGCTCCAAGTCTTGACATCTCCCGCTTCCGCTCCAGCCCCACCT
 ACCGCAACTGTCTCCAGGCCCTCAAGGAAGAGTTCACCAGGACTGTCAAGGCGCTATGGGTCTGCAGC
 CCTGAAATACCTCACTGCCCTGCAGCAGGCCCGAAGTCCGGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR230899 representing NM_001290773
 Red=Cloning site Green=Tags(s)

MLPRGRPRAMGAAVLLLLLLL VVGFFL FGRDPDYLGTTATLDEDPYRSRNL SASSPQLLLPPKCEVMLH
 VAIVCAGYNSSREIITLTKSLLFYRKNPLHLHLITDAVARNILETLFRTWMVPAVVVSYDAEELKPLVS
 WIPNKHYSGLYGLMKLVLP SILPPSLARVIVLDTDTVTFSSDIVELWALFDHFSKQVVGLENQSDWYLG
 NLWKNHRPWPALGRGFNTGVILLWLDRLQQTGWEMQWKVTAKRELLTLMATSLADQDIFNAVIKEHPHLV
 HPLPCVWNVQLSDHTRAERCYLEAADLKVIHWNSPKKLRVKNKHAEFFRNHLHLTLGYDGKLLRRELFGC
 PNQFPFGAEQLQQUALTQDDEEPCFEFRQQQLTVHRVHITFLPHQPPPPQPHDVTVAQLSMDRLQMLEA
 LCRHWPGMSLALYL TDEEAQQFLHFVETSPVLSMRKDVAYHVVYRDGPLYPNQLRNVALAQALTPYVF
 LSDIDFLPAYSLYDYL RASIEQLELDSRRKTALVVPAFETLHYRFSFPNSKAELL TLLDAGSLHTFRYHE
 WPQGHSSDYSRWREAQAPYSVQWSADYEPYVVVPRDCPRYDPRFVGFQWKNVAHIE LDAQEYEFLLVP
 EAFSIHLPHAPSLDISRFRSSPTYRNCLQALKEEFHQDL SRRYGSAAALKYLTALQQARSRA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001290773

ORF Size: 2073 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_001290773.1](#), [NP_001277702.1](#)

RefSeq Size: 2456 bp

RefSeq ORF: 2076 bp

Locus ID: 228366

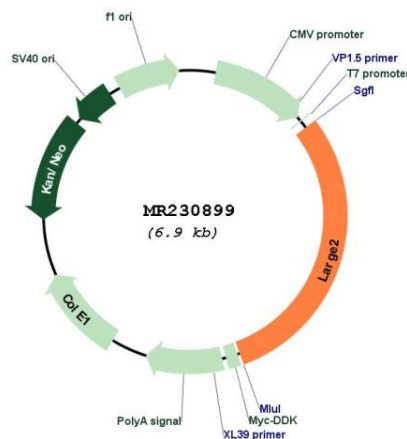
UniProt ID: [Q5XPT3](#)

Cytogenetics: 2 E1

MW: 80.1 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 (PubMed:15958417).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR230899