

## Product datasheet for **MC228524**

### Large2 (NM\_001290774) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Large2 (NM_001290774) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Large2
Synonyms:	5730485C17Rik; AI891893; Gylt11b; Largel; mKIAA4105
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >MC228524 representing NM\_001290774  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGACTGGGCACAACCTGCTACCCTCGATGAAGACCCGTACAGGAGTCGCAACCTCTCCGCCTCCAGCCC  
 GCAGTTCTACTGCCACCCAAGTGCAGGAAAAATCCGCTGCACCTCCACCTGATAACTGATGCCGTAGC  
 CAGAAACATCCTGGAGACTCTTCCGAACATGGATGGTGCCAGCGGTGGTGGTCAGTTCTATGATGCG  
 GAAGAACTCAAGCCCCTGGTCTCCTGGATCCCCAACAACACTACTCTGGCCTCTATGGGCTAATGAAGC  
 TAGTACTTCCCAGCATCTGCCTCCCAGCCTGGCCCGAGTCATCGTCTGGATACCGACGTCACCTTCTC  
 CTCTGACATTGTGGAGCTCTGGCACTCTTTGATCATTCTTCTGACAAGCAGGTGGTCCGCTCTGTTGGAG  
 AACAGAGCGACTGGTACCTGGCAACCTCTGGAAGAACCATAGGCCCTGGCCTGCCTTGGCCAGGGGAT  
 TTAACACAGGTGTGATCCTGCTGTGGCTGGACAGGCTCCAGCAAACCTGGTGGGAGCAGATGTGGAAGT  
 GACAGCCAAACGAGAGCTGCTCACTCTGATGGCTACTTCTTGGCTGACCAGGACATCTCAATGCGGTC  
 ATCAAGGAGCACCCCATCTGGTGCACCCCTGCCCTGTGTCTGGAACGTGCAGCTGTGAGACCACACTC  
 GGGCTGAGCGCTGCTACCTGGAAGCAGCTGACCTCAAAGTGATCCACTGGAATTCACCAAAGAAGCTTCG  
 AGTGAAGAACAAGCACGAGAATTCTTCCGTAATCTGCACTTGACCTTTCTGGGTATGATGGGAAGCTA  
 CTGCGAAGAGAGCTCTTTGGATGCCCAACCAAGTCCCTCCTGGGGCCGAGCAGTTGCAACAGGCCCTAA  
 CACAGCTGGATGAGGAAGAGCCCTGCTTTGAGTCCGCCAACAGCAGCTCACTGTGACCCGGGTGCACAT  
 CACCTTCTGCCCCACCAGCCGACCTCCCCAGCCTCACGATGTACCTTGGTGGCCCAACTCTCTATG  
 GACCGGCTGCAGATGCTGGAAGCCCTGTGAGGCACTGGCCAGGCCCATGAGCCTGGCCTGTACCTGA  
 CAGATGAAGAGGCTCAACAATTTCTTCAATTTGTGGAACGTGCCAGTCTCTCTATGAGGAAGGATGT  
 GGCTACCATGTAGTGTACCGGGACGGTCCACTCTATCCAGTCAACCAGCTCCGCAACGTGGCCTTGGCC  
 CAGGCTCTCACACCCTACGTCTTCTCAGTGATATTGACTTCTTACCTGCCTACTCCCTCTACGACTACC  
 TCAGGGCTTCTATCGAGCAGCTGGAGCTGGACAGTCGGCGCAAGACTGCTTTGGTGGTGCCTGCATTTGA  
 GACCTACACTACCGTTTCACTTCCAAACTCTAAGGCAGAGCTGTTGACGTTACTGGATGCCGCTCC  
 TTTCACACCTTTAGGTACCAGAGTGGCCACAGGGTCACTCATCCACAGACTATCCCGCTGGCGGGAAG  
 CCCAGGCACCATAACAGTGTGAGTGGTCACTGACTATGAACCCTACGTGGTGGTACCCCGTACTGCCC  
 CCGTTATGATCCTCGCTTTGTGGGATTTGGCTGGAACAAGGTGGCCACATCATAGAGTTGGATGCTCAG  
 GAATATGAATTCCTGGTACTTCTGAGGCCTTCTCTATCCACTTGCCCCACGCTCCAAGTCTTGACATCT  
 CCCGCTTCCGCTCCAGCCCCACCTACCGCAACTGTCTCCAGGCCCTCAAGGAAGAGTTCCACCAGGACTT  
 GTCAGGGCGCTATGGGTCTGCAGCCCTGAAATACCTCACTGCCCTGCAGCAGGCCGAAGTCCGGCC**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** Sgfl-MluI
- ACCN:** NM\_001290774
- Insert Size:** 1890 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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\\_001290774.1](#), [NP\\_001277703.1](#)

**RefSeq Size:** 2370 bp

**RefSeq ORF:** 1890 bp

**Locus ID:** 228366

**UniProt ID:** [Q5XPT3](#)

**Cytogenetics:** 2 E1

**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]

Transcript Variant: This variant (4) lacks an alternate exon in the 5' region, and it thus differs in its 5' UTR and initiates translation at an alternate start codon, compared to variant 1. The encoded isoform (4) has a distinct N-terminus and is shorter than isoform 1.