

Product datasheet for **MC221370**

Large1 (NM_010687) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Large1 (NM_010687) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Large1
Synonyms:	BPFD#36; enr; fg; froggy; Gyltl1a; Large; Mbp-1; Mbp1; myd
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC221370 representing NM_010687
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCTGGGAATCTGCAGAGGGAGAAGAAATTCCTGGCTGCCTCTTTGACTCTACTCTGCATACCGCCA
 TCACCTGGATTTACTTGTGGTGGAGCTTTGAAGATGGGAAACCTGTGTCTGTCTCCCTGGAGTC
 CCAAGCCACAGTCCCGGTACACAGCCTCCAGCCAACGGGAGCGGGAGAGCCTGGAAGTGCCTGTTTGA
 GAAGTTGAGGAGGAAAACCGTGTCTGCGCAGGCAGCTCAGCCTGGCCAGGGTCAAGAGCCTGCTCACC
 ACCGTGGGAACCACTCCAAGACCTACTCCATGGAGGAGGGGACAGGGGACAGTGAAGTCTGCGAGCTGG
 CATTGTGGCAGGTAACAGCTCTGAGTGTGGGCAGCAGCCAGCTGTGAAAAAGTGTGAGACCATCCATGTG
 GCCATCGTCTGTCCGGATAACAATGCCAGCAGGGACGTTGTACCCTGGTAAATCTGTCCTTTTCATA
 GCGGAACCTCTGCACTCCACCTCATTGCTGATTCTATTGCTGAGCAGATCCTGGCTACACTCTTCCA
 GACCTGGATGGTACCTGCAGTGCAGTAGACTTCTATAATGCTGATGAGCTCAAGTCTGAAGTGCCTGG
 ATCCCAACAAACATTACTCTGGAATTTATGGCCTGATGAAGCTGGTTCTGACCAAAACTCTGCCTGCCA
 ACCTGGAGAGAGTCATTGTCTAGACACCGACATCACCTTTGCAACAGACATTGCAGAGCTGTGGCCGT
 GTTCCATAAGTTCAAAGGGCAACAGGTCCTGGGCTTGGTAGAGAACCAGAGTGAAGTCTTGGAAAT
 CTCTGGAAAAACCACTCCATGGCCAGCTCTTGGAAAGGGCTATAACACAGGAGTCATACTACTGCTTC
 TGGACAAGCTTCGGAAGATGAAATGGGAGCAGATGTGGAGACTGACAGCAGAGAGGGAACATGGGCAT
 GTTGTCTACATCCTTGGCTGACCAGGATATTTCAATGCTGTTATCAAACAAAACCCCTTTCTGGTGTAT
 CAGTTCCTGCTTCTGGAATGTGCAGCTGTGAGCAGCAGCCGCTCTGAGCAGTGTACAGAGATGTGT
 CTGATTTAAAGGTCATCCACTGGAACCTCCCAAGAAGCTCCGTGTGAAGAACAACATGTGAATTTCTT
 CCGCAACCTCTACCTGACCTTCTTGGAGTATGATGGCAACCTCCTGCGGGGGAGCTGTTTGGCTGCCCC
 AGTGAGACTGATGTCAACAATGAAAATCTTCAAGCAGCTGTCTGAGCTGGATGAGGATGACTTGTGCT
 ATGAGTTCGGCGAGAGCGCTTCACTGTCCACAGAACCACCTGTACTTCTGCACTACGAGTTTGGCC
 TTCTGCTGACAACACAGACGTTACCCTTGTGCTCAGCTCTCCATGGACAGACTACAGATGCTGGAGGCC
 ATCTGTAACACTGGGAGGGACCCATCAGCCTGGCCCTTACCTGTGAGATGCAGAAGCCCAGCAGTTCC
 TCCGCTATGCCAGGGATCCGAGGTGCTCATGAGCCGGCAGAACGTGGGCTACCACATCGTGTACAAGGA
 GGGTCAGTTCATCCTGTCAATCTCTGCGAAACGTGGCTATGAAGCACATCAGCACACCCTACATGTTT
 TTATCTGACATTGACTTCTGCCTATGTATGGGCTCTATGAGTACCTCAGGAAATCTGTCATCCAGCTTG
 ACCTTGCCAATACCAAGAAAGCAATGATTGTCCCAGCATTGAAACGCTGCGCTACAGACTCTTTTCCC
 CAAGTCAAAGCAGAGCTGCTGTCAATGTTGGACATGGGGACCCTATTCACATTCAGGTATCACGTATGG
 ACTAAAGGCCATGCACCCACAACTTTGCCAAGTGGCGGACTGCCACCACACCTTACCAGTTGAGTGGG
 AGGCTGATTTTGGCCATATGTTGTTGTGAGACGAGACTGCCCTGAGTATGATCGGAGATTTGTGGGCTT
 TGGCTGGAACAAAGTGGCTCACATCATGGAATTGGATGCACAGGAGTATGAGTTCACCGTGTGCCCAAT
 GCCTACATGATCCACATGCCCATGCCCTAGTTTCGACATCACTAAGTCCGTTCCAACAAGCAATACC
 GCATCTGTCTCAAACCTGAAGGAAGAGTTTCAACAAGACATGTCCCGACGATATGGCTTTGCTGCCTT
 GAAATATCTCACAGCTGAGAACAACAGCTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul
ACCN: NM_010687
Insert Size: 2271 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).
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:	NM_010687.2 , NP_034817.1
RefSeq Size:	4671 bp
RefSeq ORF:	2271 bp
Locus ID:	16795
UniProt ID:	Q9Z1M7
Cytogenetics:	8 35.08 cM
Gene Summary:	<p>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) (PubMed:23125099, PubMed:23135544). Phosphorylated O-mannosyl trisaccharid is required for binding laminin G-like domain-containing extracellular proteins with high affinity and plays a key role in skeletal muscle function and regeneration (PubMed:15184894, PubMed:24132234). LARGE elongates the glucuronyl-beta-1,4-xylose-beta disaccharide primer structure initiated by B3GNT1/B4GAT1 by adding repeating units [-3-Xylose-alpha-1,3-GlcA-beta-1-] to produce a heteropolysaccharide (By similarity).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1 and 2 encode the same protein.</p>