

Product datasheet for **SC117185**

LARGE (LARGE1) (NM_004737) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LARGE (LARGE1) (NM_004737) Human Untagged Clone
Tag:	Tag Free
Symbol:	LARGE
Synonyms:	LARGE; MDC1D; MDDGA6; MDDGB6
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_004737, the custom clone sequence may differ by one or more nucleotides

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ATGCTGGGAATCTGCAGGGGAGACGGAAATTCTGGCTGCCTCGTTGAGTCTTCTCTGCATCCCAGCCA
TCACCTGGATTTACCTGTTTTCTGGGAGCTTCAAGATGGAAAGCCCGTGTCTGTCCACGCTGGAGTC
CCAGGCACACAGCCCAGGTACACGGCCTCCAGCCAGCGGAGCGGAGAGCCTGGAGGTGCGCATGCGC
GAGGTGGAGGAGGAGAACCAGCGCCCTCCGACGGCAGCTCAGCCTGGCCCAGGGCCGAGCCCATCCCATC
GCCGAGGCAACCACTCCAAGACCTACTCCATGGAGGAGGGCACTGGAGACAGCGAGAACCTTCGGGCTGG
CATCGTGGCAGGCAACAGCTCCGAGTGTGGGCAGCAGCCGGTCTGGAGAAATGCGAGACAATCCACGTT
GCTATTGTCTGCGCCGATACAATGCCAGCCGGGATGTCGTACCCTGGTCAAATCCGCTCTGTTCCATA
GACGGAACCTCTGCACTTCCACCTTATTGCTGACTCCATTGCGGAGCAGATCCTGGCCACGCTCTTCCA
GACCTGGATGGTCCCGCTGTGCGTGTGGACTTCTACAATGCAGACGAGCTCAAGTCTGAAGTTTCTGG
ATCCCAATAAACATTACTCTGGGATTTATGGTCTGATGAAGCTTGTCTGACCAAGACTCTTCTGCCA
ACCTGGAGAGAGTCATCGTCCTTGACACGGATATCACCTTGGCCACTGACATTGCAGAGCTGTGGGCTGT
GTTCCACAAGTTCAAAGTCAAGTCCCTGGGCTTGGTGGAGAACCAGAGTGAAGTACCTTGGAAAC
CTGTGGAAAAATCACCGCCCATGGCCAGCCCTTGAAGAGGCTACAACACAGGGGTGATCCTGTTACTTC
TGGATAAGCTGCGGAAGATGAAATGGGAGCAGATGTGGAGGCTGACCGCAGAGAGGGAGCTCATGGGCAT
GCTCTCTACATCCTTAGCTGACCAGGATATTTCAATGCCGTCATCAAACAAAACCCCTTCTTGTGTAC
CAGCTCCCCTGCTTCTGGAATGTGCAGCTGTGAGACCACACCCGCTCCGAGCAGTGTACAGAGACGTGT
CTGATCTAAAGGTCATTCAGTGGAACTCCCCAAGAAGCTCCGGGTGAAGAACAAGCATGTGGAGTTTTT
TCGCAACCTCTACCTGACCTTCTGGAGTATGACGGCAATCTTCTGAGGCGGGAAGTGTGGGCTGCCCC
AGTGAGGCTGATGTCAACAGTGAACCTCCAGAAGCAGCTGTCTGAGCTGGACGAGGACGACCTGTGCT
ATGAGTTCGGGCGAGAGCGCTTCACTGTCCACCGCACCCACCTGTACTTCTGCACTACGAGTATGAGCC
TGCAGCAGACAGCACGGACGTCACCCTGGTCTGCTCAGCTGTCCATGGACAGGCTCCAGATGCTGGAGGCC
ATCTGCAAGCACTGGGAGGGGCCATCAGCCTGGCCCTTACCTGTGACAGCAGGAGGCCAGCAGTTC
TCCGCTACGCACAGGGCTCTGAGGTGCTTATGAGCCGCCACAACGTGGGCTACCACATCGTGTACAAGGA
GGGCCAGTTCTACCCCGTGAACCTGCTGCGCAACGTGGCCATGAAGCACATCAGCACTCCCTACATGTTT
CTGTCTGACATTGACTTCTGCCCATGTATGGGCTCTATGAGTACCTCAGGAAGTCTGTCATCCAGCTCG
ATCTTGCCAACACCAAGAAAGCAATGATTGTCCCGCGTTCGAGACACTGCGCTACCGGCTGTCTTCCC
CAAGTCAAAGCGGAGTTGCTGTCAATGTGGACATGGGGACCCTTTCACATTCAGGTACCACGCTGG
ACGAAAGGCCACGCACCCACAACTTCGCAAGTGGCGGACCGCCACCACGCCTTACCGGTTGAGTGGG
AGGCCGATTTTGAGCCGTATGTTGTTGTGAGACGTGACTGCCCGGAGTACGACCGGAGGTTTGTAGGCTT
TGGCTGGAAACAAAGTGGCTCATATCATGGAGCTGGATGTGCAGGAGTATGAGTTCATTGTGCTGCCAAC
GCCTACATGATCCACATGCCTCATGCCCCAGCTTCGACATTACCAAGTCCGTTCCAACAAGCAATACC
GCATCTGTCTCAAACCTCAAGGAAGAGTTTCAGCAGGACATGTCCCGCGCTACGGCTTTGCTGCCCT
GAAATATCTCACAGCCGAGAACAACAGCTAG
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_004737 unedited</p> <pre> NGGTCCAAATTTTNTATACGACTCACTATAGGGCGGCCGNAATTCGCACGAGGCTGG CTCGGAAGAGTCCCCGGGCCGGGAGCAGCTCCAGGCAGCGGCCCGGAGGAAGAGGAAG AAGGGACAGTGTCTCAGCTTGGGGACCCGGACCCTCGCCGCGCATTTGGAGCCGGGGC AGTCCCGAACTCTGTGCTTGGCACCCGCTCCGAGTAGGGCAGCGCCTGCCGGGACCCT GACCCGGACCCCTGCGCCTCGTAGGCGGCGGCCCGCCGCGCCACCCTGTTCTTCCGTG TCTCCCTCTGCTGGCGGAGTACCGCCAAAGAGAGATTATGAGGGAGGCCGAGGACTT CATGCTCCGGACAGAGAAACGGCGCTGGGATTAGGGATTGCCACTTCTGAGAGGATGCTG GGAATCTGCAGGGGGAGACGAAATTTGGCTGCCTCGTTGAGTCTTCTCTGCATCCCA GCCATCACCTGGATTTACCTGTTTTCTGGGAGCTTCAAGATGGAAGCCCGTGTCTCTG TCACCGCTGGAGTCCCAGGCACACAGCCCCAGGTACACGGCTCCAGCCAGCGGGAGCGC GAGAGCCTGGAGGTGCGCATGCGCGAGGTGGAGGAGGAGAACCAGCCCTCCGCAGGCAG CTCAGCCTGGCCAGGGCCGAGCCCCATCCCATCGCCGAGGCAACCACTCCAAGACCTAC TCCATGGAGGANGGCACTGGAGACAGCGAGAACCTTCGGGCTGGCATCGTGGCAGGCAAC AGCTCCGAGTGTGGGCAGCAGCCGNTCGTGGAGAAATGCGAGACAAATCCACGTGCTAT TGCTGCGCTGGATCAATGCCAGCCGGGATGTCGTACCTGGTCAATCCCGTCTGTCCAT AGACGNA </pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_004737 unedited</p> <pre> NNNAAAATTTAGCTATGNCCGCGCCGCAATCTANGATCGGTTTTTTTTTTTTTTTTTTG TCTGTACTTTTATTTAATAATGCAGCTTTCGCTGGTACATTGCAACTCAATACAAACA GCCCAGCAGAGGGTAGGGCATTAACTCTTGTTCATCAATGTAACACAATATTAATAT TGAAGATTAAAGAAAATGGGTAAAAAGTCCAGTGTCTCCTCAATCTGTGTGAAGGTGAAG GTGGTTGCTACCTTGACAGGTCCCAAAGGGAGACTGAGGTTGTACCTCTTCCCATC CACAGTGAAGCAGGCAAGAACCAGAGGAACCCAATCACTTTCTTCTGTAGGTCTCCAGA TGGATACGTGAATCTTCAGAAGTGGGCTTTCATGAATTATGAAAGTTCTTCGAAAGGCT GAGAGGTTTCGTACCTTGTGTGACTGAAGTAGTTTCCTCAAAGCCCTTCCCATGAAT CAGTCACTGCCAATANAAAATGTGACCGGTGTAACAGCCAGCCCTCGTAATCCGCAG TCCCCATCGTATAGCCCTGGATTCTGGAGAGTAGGGAGTTCAAAGTACGGGAGCCTC CGTGATCATCTGAAGGAAGCTGCCCATGTTAAATATCGGGCGAAGATGCTTGACCTCT TCTGGGCCACTGCTGAATGAGGNGGGTGGTAAAAGCAANNTAATTTTTCTTTATAAC CCTCTAAGATCAGATTTTTTATTTGGATTGGACCCCCAAAATAAACAAACCCCCCAGA AAAAACAAACAAAACAGGAGTGACTTTTGGGATAAAGGAAACCATTACCCCCCTCCCGG AACCTGGGTTCAAGGCCCATGGGTTCTTCCAAAAGGGGGGTAAAAATAAGTATG CCCTCCGTTGAAACCCAACTA </pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_004737
Insert Size:	4110 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:

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_004737.3](#), [NP_004728.1](#)

RefSeq Size: 4194 bp

RefSeq ORF: 2271 bp

Locus ID: 9215

UniProt ID: [O95461](#)

Cytogenetics: 22q12.3

Domains: Glyco_transf_8

Protein Families: Druggable Genome, Transmembrane

Gene Summary: This gene encodes a member of the N-acetylglucosaminyltransferase gene family. It encodes a glycosyltransferase which participates in glycosylation of alpha-dystroglycan, and may carry out the synthesis of glycoprotein and glycosphingolipid sugar chains. It may also be involved in the addition of a repeated disaccharide unit. The protein encoded by this gene is the glycotransferase that adds the final xylose and glucuronic acid to alpha-dystroglycan and thereby allows alpha-dystroglycan to bind ligands including laminin 211 and neurexin. Mutations in this gene cause several forms of congenital muscular dystrophy characterized by cognitive disability and abnormal glycosylation of alpha-dystroglycan. Alternative splicing of this gene results in multiple transcript variants that encode the same protein. [provided by RefSeq, May 2018]

Transcript Variant: This variant (1) represents the longer transcript. Variants 1 and 2 encode the same protein.