

Product datasheet for **SC120425**

LARGE (LARGE1) (NM_133642) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LARGE (LARGE1) (NM_133642) 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_133642, the custom clone sequence may differ by one or more nucleotides

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ATGCTGGGAATCTGCAGGGGAGACGGAAATTCTGGCTGCCTCGTTGAGTCTTCTCTGCATCCCAGCCA
TCACCTGGATTTACCTGTTTTCTGGGAGCTTCAAGATGGAAAGCCCGTGTCTGTCCACGCTGGAGTC
CCAGGCACACAGCCCCAGGTACACGGCCTCCAGCCAGCGGGAGCGGAGAGCCTGGAGGTGCGCATGCGC
GAGGTGGAGGAGGAGAACCAGCGCCCTCCGACGGCAGCTCAGCCTGGCCCAGGGCCGAGCCCCATCCCATC
GCCGAGGCAACCACTCCAAGACCTACTCCATGGAGGAGGGCACTGGAGACAGCGAGAACCTTCGGGCTGG
CATCGTGGCAGGCAACAGCTCCGAGTGTGGGCAGCAGCCGGTCTGGAGAAATGCGAGACAATCCACGTT
GCTATTGTCTGCGCCGGATAACAATGCCAGCCGGGATGTCGTACCCTGGTCAAATCCGCTCTGTTCCATA
GACGGAACCTCTGCACTTCCACCTTATTGCTGACTCCATTGCGGAGCAGATCCTGGCCACGCTCTTCCA
GACCTGGATGGTCCCGCTGTGCGTGTGGACTTCTACAATGCAGACGAGCTCAAGTCTGAAGTTTCTGG
ATCCCCAATAAACATTACTCTGGGATTTATGGTCTGATGAAGCTTGTCTGACCAAGACTCTTCTGCCA
ACCTGGAGAGAGTCATCGTCCTTGACACGGATATCACCTTGGCCACTGACATTGCAGAGCTGTGGGCTGT
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CTGTGGAAAAATCACCGCCCATGGCCAGCCCTTGAAGAGGCTACAACACAGGGGTGATCCTGTTACTTC
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GCTCTCTACATCCTTAGCTGACCAGGATATTTCAATGCCGTCATCAAACAAAACCCCTTCTTGTGTAC
CAGCTCCCCTGCTTCTGGAATGTGCAGCTGTGAGACCACACCCGCTCCGAGCAGTGTACAGAGACGCTGT
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TCGCAACCTCTACCTGACCTTCTGGAGTATGACGGCAATCTTCTGAGGCGGGAAGTGTGGCTGCCCC
AGTGAGGCTGATGTCAACAGTGAACCTCCAGAAGCAGCTGTCTGAGCTGGACGAGGACGACCTGTGCT
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ATCTGCAAGCACTGGGAGGGGCCATCAGCCTGGCCCTTACCTGTGAGACGCGGAGGCCAGCAGTTC
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CTGTCTGACATTGACTTCTGCCCATGTATGGGCTCTATGAGTACCTCAGGAAGTCTGTCATCCAGCTCG
ATCTTGCCAACACCAAGAAAGCAATGATTGTCCCGCGTTCGAGACACTGCGCTACCGGCTGTCTTCCC
CAAGTCAAAGCGGAGTTGCTGTCAATGTGGACATGGGGACCCTTTCACATTCAGGTACCACGCTGG
ACGAAAGGCCACGCACCCACAACTTCGCAAGTGGCGGACCGCCACCACGCCTTACCGGTTGAGTGGG
AGGCCGATTTTGAGCCGTATGTTGTTGTGAGACGTGACTGCCCGGAGTACGACCGGAGGTTTGTAGGCTT
TGGCTGGAAACAAAGTGGCTCATATCATGGAGCTGGATGTGCAGGAGTATGAGTTCATTGTGCTGCCAAC
GCCTACATGATCCACATGCCTCATGCCCCAGCTTCGACATTACCAAGTCCGTTCCAACAAGCAATACC
GCATCTGTCTCAAAACCTCAAGGAAGAGTTTCAGCAGGACATGTCCCGCGCTACGGCTTTGCTGCCCT
GAAATATCTCACAGCCGAGAACAACAGCTAG
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_133642 unedited
 ATTAGGTATACGAACTACTATAGGGCGGCCGGAATTCGGCACGAGGCAGCCCCCCCCG
 CGCCGCCGCGCTCGGCGCCCGGCCGAGTCTGCTCCTGCCCCGCGCCGCGCCGGAG
 CCCGGGCGCCGAAGCTGGGGCGCGGCCGCGCTCGTCTCGCCGGGTGTTGCGGGGAG
 GCCCTGCCCTGAAGGGACGAATCGGCTTGGAGCGGGAGGTGGAGTCGGCCCCGGCGT
 CGCTCCCTGGACCAACCCGAGGCTGACCAGGCCCTGCCATCGGGGCGCCCTGTC
 TCGGAAGAGTCCCCGGGCCGGAGCAGCTCCAGGCAGCGGCCCGGAGGAAGAGGAAGA
 AGGGACAGTGCTCAGCTTGGGGACCCGACCCTCGCCGCGCATTTGGAGCCGGGGCA
 GTCCCGAACTCTGTGCTTGGCACCGCGCTCCGAGTAGGGCAGCGCTGCCGGGACTCTG
 ACCCGGACCCCTGCGCCTCGTAGGCGGCGCGCCGCGCCGACCCTGTTCTTCCGTGT
 CTCCTCTGCCTGGCGGAGTACGGCCAAGAACCTACATTAAGAAACGCATTAGATGC
 ATCAGCCGTTTGTAAAGCACCTGCTGTGAGCCAGAGAGTATTATGAGGGAGGCCGAGGAC
 TTCATGCTCCGGACAGAGAAACGGCGTGGGATTANGGATTGCCACTTCTGAGAGGATGC
 TGGGAATCTGCAGNGGAGACGGANATTCTTGGCTGCCTCGTTGAGTCTTCTCTGCATCC
 CAGCCATCACCTGGGATTACCTGTTTTCTGGGAGCTTCGAAGATGAAAGCCCGTGTCTCT
 GTACCCGCTGGAGTCCCCAGCCACAGGCCAGTTACACGCGCTCCAGCCAGCGGGAGCGC
 GAGAGCCTGTAGTGCGCATGCCCAAGTTGGAGAGAAGACCGCGCTCCGACGAGGTAAC
 CTGTCCAGGCCGACCCCATCT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_133642 unedited
 ATCGGAGGTAAAAAACCCCGTCGCTTTCGCTGGTCACATCTGCACTCATAACAACAGC
 CCTTTGTAGGTAGGCATTAACCTTGTCTCATCAATGTAACAACAATATTAATATTGA
 AGATTAAGAAAAATGGGTAAAAAGTCCAGTGTCTCCTCAATCTGTGTGAAGGTGAAGGTG
 GTTGCCTACCCCTTGACAGGTCCCAAAGGAGACTGTTGTTGTCACCTTCCCATCCAC
 AGTGAAGCAGGCAAGAACCAGAGGAACCAATCACTTTCTCCTGTAGGTCTCCAGATGG
 ATACGTGAATCTTCAGAACTGGGCTTTCATGAATTATGAAAGTCTTCGAAAGGCCTGAG
 AGGTTTCGTACCTTGTGTGTGCACTGAAGTAGTTCCTTCACAGCCCTTCCCATGAATCAG
 TCCCTGCCAATAGAAAATGTGACCGGTGTAACAACAGCCATCCCCTCGTAATCCCGAGTC
 CCCATCGCTCTAGCCCCGGATTCTGGAGAGTCGGGAGTTCATAGTCACGGTAGCCTCGG
 TGATCCCTCCCTGACGGAAGCCTGCCCTGCTCAATTATCGGCCGAAGATGCCTTGACCTCC
 TTTCTGAGCCACTGCTTGCTACAGGGGTGCTGCGCCACGCGAGCCTGACTCTTCCCTCT
 ATCGCCTCACAGGCACAGATCTCCTCTCTCCGTTTTGTACCCCTATCGTTACCACAA
 CCTCCCTGCCATATCCTTTCTACTCTGGTGTGCTTTCGCGGATTTGAAACCCCTCCT
 CCCCCCTTCCGCTCCCTCTGCTCCACCGGCTCCTTTGCGGTTTCTCCTCATGTTTGT
 CTAACCTCTTCGGCATGTCTCCCTTATTATATCCCCGCTCCATAGTGGGGCTCACGCG
 TTACCTCTCCCCCTCGTAGGCCATTTCCGCTTTCATCTCCATGAAAAAAAAC

Restriction Sites:

NotI-NotI

ACCN:

NM_133642

Insert Size:

3750 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_133642.2](#), [NP_598397.1](#)

RefSeq Size: 4131 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 (2) differs in the 5' UTR, compared to variant 1.