

Product datasheet for **RG223788**

LARGE (LARGE1) (NM_133642) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LARGE (LARGE1) (NM_133642) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LARGE
Synonyms:	LARGE; MDC1D; MDDGA6; MDDGB6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG223788 representing NM_133642
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGGGAATCTGCAGGGGAGACGGAAATCTTGGCTGCCTCGTTGAGTCTTCTCTGCATCCCAGCCA
 TCACCTGGATTTACCTGTTTTCTGGGAGCTTCGAAGATGGAAAGCCCGTGTCTGTACCAGCTGGAGTC
 CCAGGCACACAGCCCCAGGTACACGGCCTCCAGCCAGCGGGAGCGGAGAGCCTGGAGGTGCGCATGCGC
 GAGGTGGAGGAGGAGAACCAGCGCCCTCCGAGGCAGCTCAGCCTGGCCCAGGGCCGAGCCCCATCCCATC
 GCCGAGGCAACCACTCCAAGACCTACTCCATGGAGGAGGGCACTGGAGACAGCGAGAACCTTCGGGCTGG
 CATCGTGGCAGGCAACAGCTCCGAGTGTGGCAGCAGCCGGTCTGGAGAAATGCGAGACAATCCACGTT
 GCTATTGTCTGCGCCGATAACAATGCCAGCCGGGATGTCGTCACCCTGGTCAAATCCGTCCTGTTCCATA
 GACGGAACCTCTGCACTTCCACCTATTGCTGACTCCATTGCGGAGCAGATCCTGGCCAGCTCTTCCA
 GACCTGGATGGTCCCGCTGTGCGTGTGGACTTCTACAATGCAGACGAGCTCAAGTCTGAAGTTTCTGG
 ATCCCCAATAAACATTACTCTGGGATTTATGGTCTGATGAAGCTTGTCTGACCAAGACTCTTCTGCCA
 ACCTGGAGAGAGTCATCGTCTTGACACGGATATCACCTTTGCCACTGACATTGCAGAGCTGTGGGCTGT
 GTTCCACAAGTTCAAAGGTGAGCAAGTCCCTGGGCTTGGTGGAGAACCAGAGTGACTGGTACCTTGGAAAC
 CTGTGGAAAAATCACCGCCATGGCCAGCCCTTGAAGAGGCTACAACACAGGGGTGATCCTGTTACTTC
 TGGATAAGCTGCGGAAGATGAAATGGGAGCAGATGTGGAGGCTGACCGCAGAGAGGGAGCTATGGGCAT
 GCTCTCTACATCCTTAGCTGACCAGGATATTTCAATGCCGTATCAAACAAAACCCCTTCTTGTGTAC
 CAGCTCCCCTGCTTCTGGAATGTGCAGCTGTGAGACCACCCCGCTCCGAGCAGTGCTACAGAGACGTGT
 CTGATCTAAAGGTCATTCAGTGAAGTCCCCAAGAAGCTCCGGGTGAAGAACAAGCATGTGGAGTTTTT
 TCGCAACCTCTACCTGACCTTCTGGAGTATGACGGCAATCTTCTGAGGCGGGAACGTTTGGCTGCCCC
 AGTGAGGCTGATGTCAACAGTGAACCTCCAGAAGCAGCTGTCTGAGCTGGACGAGGACGACCTGTGCT
 ATGAGTTCGGCGAGAGCGCTTCACTGTCCACCGACCCACCTGTACTTCTGCACTACGAGTATGAGCC
 TGCAGCAGACAGCAGGACGTCACCCTGGTCGCTCAGCTGTCCATGGACAGGCTCCAGATGCTGGAGGCC
 ATCTGCAAGCACTGGGAGGGGCCATCAGCCTGGCCCTTACCTGTGAGACGCGGAGGCCAGCAGTTCC
 TCCGCTACGCACAGGGCTCTGAGGTGCTTATGAGCCGCCACAACGTGGGCTACCACATCGTGTACAAGGA
 GGGCCAGTTCTACCCCGTGAACCTGCTGCGCAACGTGGCCATGAAGCACATCAGCACTCCCTACATGTTT
 CTGTCTGACATTGACTTCTGCCATGTATGGGCTCTATGAGTACCTCAGGAAGTCTGTATCCAGCTCG
 ATCTTGCCAACACCAAGAAAGCAATGATTGTCCCCTGTTGAGACACTGCGCTACCGGCTGTCTTCCC
 CAAGTCAAAGCGGAGTTGCTGTCAATGCTGGACATGGGACCCCTTTCACATTCAGGTACCACGCTGG
 ACGAAAGGCCACGCACCCACAACTTCGCCAAGTGGCGGACCGCCACCACGCCTTACCGGTTGAGTGGG
 AGGCCGATTTTGGCCGATGTTGTTGTGAGACGCTGACTGCCCGAGTACGACCGGAGGTTTGTAGGCTT
 TGGCTGGAACAAAGTGGCTCATATCATGGAGCTGGATGTGCAGGAGTATGAGTTTATTGTGCTGCCAAC
 GCCTACATGATCCACATGCCTCATGCCCCAGCTTCGACATTACCAAGTCCGTTCCAACAAGCAATACC
 GCATCTGTCTCAAACCCCTCAAGGAAGAGTTTCAGCAGGACATGTCCCCTGCTACGGCTTGTGCTCCCT
 GAAATATCTCACAGCCGAGAACAACAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG223788 representing NM_133642
Red=Cloning site Green=Tags(s)

MLGICRGRRKFLAASLSLLCIPAITWIYLFSGSFEDGKPVSLSPLESQAHSPTYASSQRERESLEVRMR
 EVEEENRALRRQLSLAQGRAPSHRRGNHSTYSMEEGTGDSLENLRAGIVAGNSSECGQPVVEKCEITHV
 AIVCAGYNASRDVVTLVKSVLFHRRNPLHFHLLIADSLAEQILATLFTQWMPAVRVDFYNADLQSEVSW
 IPNKHYSGIYGLMKLVLTKTLPANLERVIVLDTDITFATDIAELWAVFHKFKGQQVLGLVENQSDWYLG
 LWKNHRPWPALGRGYNTGVILLLLDKLRKMKWEQMWRLTAERELMGMLSTSLADQDIFNAVIKQNPFLVY
 QLPCFWNVQLSDHTRSEQCYRDVSDLKVIHWNVSPKLRVKNKHVEFFRNLYLTFLEYDGNLLRRELFGCP
 SEADVNSENLQKQLSELDEDDLCYEFRRERFTVHRTHLYFLHYEYEPAADSTDVTLVAQLSMDRLQMLEA
 ICKHWEGPISLALYLSDAEAQQFLRYAQGSEVLSMRHNVGYHIVYKEGQFYPVNLNRNVAMKHISTPYMF
 LSDIDFLPMYGLYEYLRKSVIQLDLANTKKAMIVPAFETLRYRLSFPKSKAELLSMLDMGTLFTFRYHVW
 TKGHAPTNAKAWRTATTPYRVEWADFEPYVVVRRDCPEYDRRFVGFGWNVKVAHIMELDVQEQYEFIVLPN
 AYMIIHMPHAPSFDITKFRSNKQYRICLTKLKEEFQQDMSRRYGF AALKYLAENNS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_133642

ORF Size: 2268 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_133642.5](#)

RefSeq Size: 4131 bp

RefSeq ORF: 2271 bp

Locus ID: 9215

UniProt ID: [O95461](#)

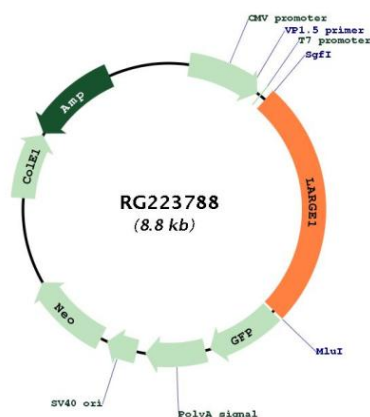
Cytogenetics: 22q12.3

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]

Product images:



Circular map for RG223788

