

Product datasheet for **RC217876**

LARGE (LARGE1) (NM_004737) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LARGE (LARGE1) (NM_004737) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LARGE
Synonyms:	LARGE; MDC1D; MDDGA6; MDDGB6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC217876 representing NM_004737
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCTGGGAATCTGCAGGGGAGACGGAATTCTTGGCTGCCTCGTTGAGTCTTCTCTGCATCCCAGCCA
TCACCTGGATTTACCTGTTTTCTGGGAGCTTCGAAGATGGAAAGCCCGTGTCTGTACCAGCTGGAGTC
CCAGGCACACAGCCCCAGGTACACGGCCTCCAGCCAGCGGGAGCGCAGAGCCTGGAGGTGCGCATGCGC
GAGGTGGAGGAGGAGAACCAGCGCCCTCCGACGGCAGCTCAGCCTGGCCAGGGCCGAGCCCCATCCCATC
GCCGAGGCAACCACTCCAAGACCTACTCCATGGAGGAGGGCACTGGAGACAGCGAGAACCTTCGGGCTGG
CATCGTGGCAGGCAACAGCTCCGAGTGTGGCAGCAGCCGGTCTGGAGAAATGCGAGACAATCCACGTT
GCTATTGTCTGCGCCGATAACAATGCCAGCCGGGATGTCGTCACCCTGGTCAAATCCGCTCTGTTCCATA
GACGGAACCTCTGCACTCCACCTTATTGCTGACTCCATTGCGGAGCAGATCCTGGCCAGCTCTTCCA
GACCTGGATGGTCCCGCTGTGCGTGTGGACTTCTACAATGCAGACGAGCTCAAGTCTGAAGTTTCTGG
ATCCCCAATAAACATTACTCTGGGATTTATGGTCTGATGAAGCTTGTCTGACCAAGACTCTTCTGCCA
ACCTGGAGAGAGTCATCGTCTTGACACGGATATCACCTTTGCCACTGACATTGCAGAGCTGTGGGCTGT
GTTCCACAAGTTCAAAGGTGAGCAAGTCCCTGGGCTTGGTGGAGAACCAGAGTGACTGGTACCTTGGAAAC
CTGTGGAAAAATCACCGCCATGGCCAGCCCTTGAAGAGGCTACAACACAGGGGTGATCCTGTTACTTC
TGGATAAGCTGCGGAAGATGAAATGGGAGCAGATGTGGAGGCTGACCGCAGAGAGGGAGCTATGGGCAT
GCTCTCTACATCCTTAGCTGACCAGGATATTTCAATGCCGTATCAAACAAAACCCCTTCTTGTGTAC
CAGCTCCCCTGCTTCTGGAATGTGCAGCTGTGAGACACACCCGCTCCGAGCAGTGTACAGAGACGTGT
CTGATCTAAAGGTCATTCAGTGAAGTCCCAAGAAAGTCCCGGTGAAGAACAAGCATGTGGAGTTTTT
TCGCAACCTCTACCTGACCTTCCCTGGAGTATGACGGCAATCTTCTGAGGCGGGAACCTGTTGGCTGCCCC
AGTGAGGCTGATGTCAACAGTGAACCTCCAGAAGCAGCTGTCTGAGCTGGACGAGGACGACCTGTGCT
ATGAGTTCGGCGAGAGCGCTTCACTGTCCACCGCACCCACCTGTACTTCTGCACTACGAGTATGAGCC
TGCAGCAGACAGCAGGACGTCACCCTGGTCTGCTCAGCTGTCCATGGACAGGCTCCAGATGCTGGAGGCC
ATCTGCAAGCACTGGGAGGGGCCATCAGCCTGGCCCTTACCTGTGAGACGCGGAGGCCAGCAGTTCC
TCCGCTACGCACAGGGCTCTGAGGTGCTTATGAGCCGCCACAACGTGGGCTACCACATCGTGTACAAGGA
GGGCCAGTTCTACCCCGTGAACCTGCTGCGCAACGTGGCCATGAAGCACATCAGCACTCCCTACATGTTT
CTGTCTGACATTGACTTCTGCCATGTATGGGCTCTATGAGTACCTCAGGAAGTCTGTATCCAGCTCG
ATCTTGCCAACACCAAGAAAGCAATGATTGTCCCGCGTTCGAGACACTGCGCTACCGGCTGTCTTCCC
CAAGTCAAAGCGGAGTTGCTGTCAATGCTGGACATGGGACCCCTCTTACATTCAGGTACCACGCTCTGG
ACGAAAGGCCACGCACCCACAACTTCGCCAAGTGGCGGACCGCCACCACGCCTTACCGGTTGAGTGGG
AGGCCGATTTTGGCCGATGTTGTTGTGAGACGTGACTGCCCGGAGTACGACCGGAGGTTTGTAGGCTT
TGGCTGGAACAAAGTGGCTCATATCATGGAGCTGGATGTGCAGGAGTATGAGTTCATTGTGCTGCCAAC
GCCTACATGATCCACATGCCTCATGCCCCAGCTTCGACATTACCAAGTCCGTTCCAACAAGCAATACC
GCATCTGTCTCAAACCCCTCAAGGAAGAGTTTCAGCAGGACATGTCCCGCGCTACGGCTTGTGTCCT
GAAATATCTCACAGCCGAGAACAACAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC217876 representing NM_004737
 Red=Cloning site Green=Tags(s)

MLGICRGRRKFLAASLSLLCIPAITWIYLFSGSFEDGKPVSLSPLESQAHSPTYASSQRERESLEVRMR
 EVEEENRALRRQLSLAQGRAPSHRRGNHSTYSMEEGTGDSENLRAGIVAGNSSECGQPVVEKCEITHV
 AIVCAGYNASRDVVTLVKSVLFHRRNPLHFHLLIADSLAEQILATLFTQWMPAVRVDFYNADLSEVSW
 IPNKHYSGIYGLMKLVLTKTLPANLERVIVLDTDITFATDIAELWAVFHKFKGQQVGLGVENQSDWYLG
 LWKNHRPWPALGRGYNTGVILLLLDKLRKMKWEQMWRLTAERELMGMLSTSLADQDIFNAVIKQNPFLVY
 QLPCFWNVQLSDHTRSEQCYRDVSDLVKVIHWNSPKKLRVKNKHVEFFRNLYLTFLEYDGNLLRRELFGCP
 SEADVNSENLQKQLSELDEDDLCYFRFRERFTVHRTHLYFLHYEYEPADSTDVTLVAQLSMDRLQMLEA
 ICKHWEGPISLALYLSDAEAQQFLRYAQGSEVLSMRHNVGYHIVYKEGQFYVNNLLRNVAMKHISTPYMF
 LSDIDFLPMYGLYEYLRKSVIQLDLANTKKAMIVPAFETLRYRLSFPKSKAELLSMLDMGTLFTFRYHVW
 TKGHAPTNAKAWRTATTPYRVEWADFEPYVVVRRDCPEYDRRFVGFGWNVVAHIMELDVQEYEFIVLPN
 AYMIHMPHAPSFDITKFRSNKQYRICLTKLKEEFQQDMSRRYGF AALKYLT AENNS

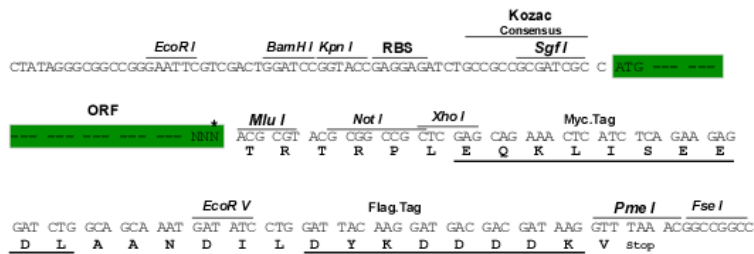
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6603_g05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_004737

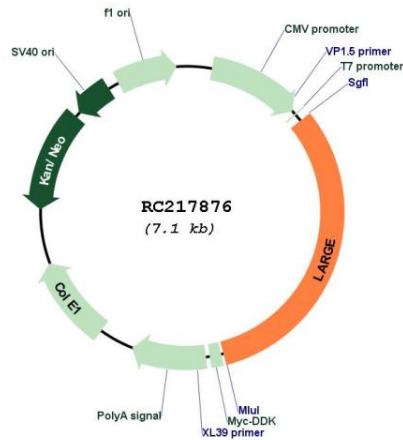
ORF Size: 2268 bp

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](#)

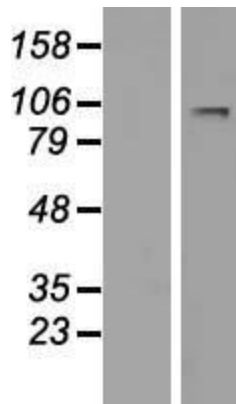
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<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_004737.7
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
MW:	87.9 kDa
Gene Summary:	<p>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]</p>

Product images:



Circular map for RC217876



Western blot validation of overexpression lysate (Cat# [LY408762]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC223788] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).