

Product datasheet for **RC223823**

POMT1 (NM_007171) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	POMT1 (NM_007171) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	POMT1
Synonyms:	LGMD2K; LGMDR11; MDDGA1; MDDGB1; MDDGC1; RT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC223823 representing NM_007171
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTGGGATTTTTGAAGCGCCCTGTAGTGGTGACGGCTGACATCAACTTGAGCCTTGTGGCCCTGACTG
 GGATGGGGTTACTGAGCCGGCTGTGGCGACTCACCTACCCGCGGGCTGTGGTTTTTGACGAAGTATATTA
 TGGGCAGTACATCTTTTTACATGAAACAAATCTTCTTGGATGACAGTGGGCCGCCATTTGGCCAC
 ATGGTGTGGCCTTGGGAGGTTATTTAGGAGGATTCGATGGCAATTTTTGTGGAACAGAATTGGAGCAG
 AATACAGTAGCAACGTGCCTGTGTGGTCCCTGCGCCTGCTGCCAGCACTCGCGGGGGCCTTGTGGTCCC
 CATGGCCTACCAGATAGTGTGGAGCTCCACTTTTCTCATTGTGCCGCCATGGGAGCTGCTCTGTTGATG
 CTTATCGAGAATGCTCTCATCACTCAGTCAAGGCTAATGCTTTTGAATCAGTGTAATATTTTTCAATC
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 GTTCTGGCTAACACTGACAGGGTCTGTTCTTGTGAGTGGCATCAAGTACATGGGTGTGTTACAG
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 TAGGTGCTGATGTCCAGTGTGCATGAGGCCGGCCTGTATGGGGCAGATGCGGATGTCACAGGGGTCTG
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 CCAGCTTAGAGGGAGGACTAGCTCGGATCACCCAGGGTCAAGCACTGGAGGTGGCCTTTGGGTCCAGGT
 CACTCTGAGGAACGTCTTTGGGAAACCTGTGCCCTGTGGCTTCACTCCACCAGGACACCTACCCCATG
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 ACTGGTGGATTGTAAGGATCCCAGGAGCACCAGCTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
 CGGGGACATGGTGCAGCTGGTCCACGGCATGACCACCGCTCCCTGAACACGCATGATGTTGCAGCCCC
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 GATGCCTGGTGCCTGGTGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
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 CCCTGTGGTCTGCAGCAGTACAGCAGCAGTGTGCAGTCCCAGCTCCAGAGGAGCATCTTACAGCGCC
 CTGGTGGTGGCCTGGTACTCCTCCGCGTCCACGTGTCCAACACGCTGCGCCCACTCACCTACGGGGACA
 AGTCACTCTGCCACATGAACTCAAGGCCCTTCGCTGGAAGACAGCTGGGACATCTTGATCCGAAAACA
 C

ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC223823 representing NM_007171
 Red=Cloning site Green=Tags(s)

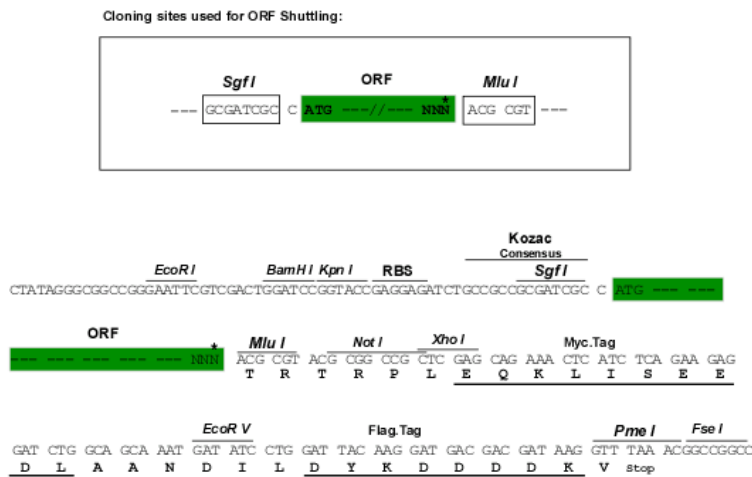
MWGF LKRPVVV TADINLSLVALTGMGLLSRLWRLTYPRVVFDEVYVYQYISFYMKQIFFLDDSGPPFGH
 MVLALGGYLGFDGNFLWNRIGAEYSSNPVWSLRLPALAGALSVPMAYQIVLELHFHSHCAAMGAALLM
 LIENALITQSRMLLESVLIFFNLLAVLSYLKFFNCQKHSPFSLSWFWLTLTGACSCAVGIKYMVFT
 YVLVLGVAAVHAWHLLGDQTL SNVGADVQCMPACMGQMRMSQGVCFCHLLARAVALLVIPVLYLLF
 FYVHLILVFRSGPHDQIMSSAFQASLEGLARITQGQPLEVAFGSQVTLRNVFGKPVPCWLHSHQDTYPM
 IYENGRGSSHQQVTCYPFKDVNNWIVKDPRRHQLVVSPPRPVRHGD MVQLVHGMTTRSLNTHDVAAP
 LSPHSQEVSCYIDYNISMPAQNLRLEIVNRGSDTDVWKTILSEVRFVHVNTSAVLKLSGAHLPDWGYRQ
 LEIVGKLSRGGYHGSTVWNVEEHRYGASQEQRRERELHSPAQVDVSRNLSFMARFSELQWRMLALRSD
 SEHKYSSSLEWVTLDTNIAYWLHPRTSAQIHLGNIVIWVSGSLALAIYALLSLWYLLRRRRNVHDLPO
 DAWLRWVLGALCAGGWAVNYLPFFLMEKTLFLYHYLPALTFQILLLPVVLQHISDHLCRSOLQRSIFSA
 LVVAWYSSACHVSNTLRPLTYGDKSLSPHELKALRWKDSWDILIRKH

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_007171

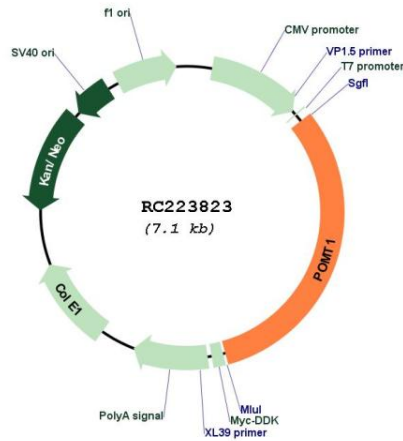
ORF Size: 2241 bp

OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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_007171.3 , NP_009102.3
RefSeq Size:	3150 bp
RefSeq ORF:	2244 bp
Locus ID:	10585
UniProt ID:	Q9Y6A1
Cytogenetics:	9q34.13
Domains:	PMT, MIR
Protein Families:	Transmembrane
Protein Pathways:	O-Mannosyl glycan biosynthesis
MW:	84.7 kDa

Gene Summary:

The protein encoded by this gene is an O-mannosyltransferase that requires interaction with the product of the POMT2 gene for enzymatic function. The encoded protein is found in the membrane of the endoplasmic reticulum. Defects in this gene are a cause of Walker-Warburg syndrome (WWS) and limb-girdle muscular dystrophy type 2K (LGMD2K). Several transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Oct 2008]

Product images:



Circular map for RC223823