

Product datasheet for **RC209439**

POMT1 (NM_001077366) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	POMT1 (NM_001077366) 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:

>RC209439 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGTGGGGATTTTTGAAGCGCCCTGTAGTGGTGACGGCTGACATCAACTTGAGCCTTGTGGCCCTGACTG
GGATGGGGTTACTGAGCCGGCTGTGGCGACTCACCTACCCGCGGGCTGTGGTTTTTGACGAAGTATATTA
TGGGCAGTACATCTTTTTACATGAAACAAATCTTCTTGGATGACAGTGGGCCGCCATTTGGCCAC
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AATACAGTAGCAACGTGCCTGTGTGGTCCCTGCGCCTGCTGCCAGCACTCGCGGGGGCCTTGTGGTCCC
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GACAAGTCACTCTCGCCACATGAACTCAAGGCCCTTCGCTGGAAGACAGCTGGGACATCTTGATCCGAA
AACAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC209439 protein sequence
Red=Cloning site Green=Tags(s)

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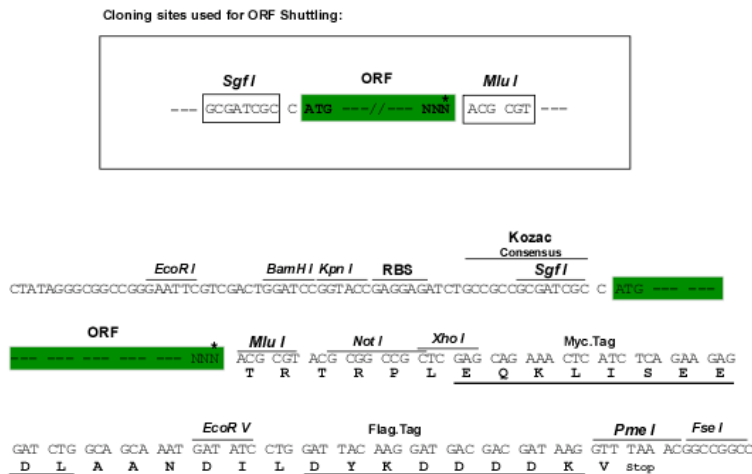
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LIENALITQSRMLLESVLIFFNLLAVLSYLKFFNCQKHSPFSLSWFWLTLTGACSCAVGIKYMVFVTF
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NNWWIVKDPRRHQLVVSPPRPVRHGMVQLVHGTTTSLNTHDVAAPLSPHSQEVSCYIDYNI SMPAQN
LWRLEIVNRGSDTDVWTKILSEVRFVHVNTSAVLKLSGAHL PDWGYRQLEIVGEKLSRGYHGSTVWNVEE
HRYGASQEQRERERELHSPAQVDVSRNLSF MARFSELQWRMLALRSDDSEHKYSSSPLEWVTLDTNIAYW
LHPRTSAQIHLLGNIVIWVSGSLALAIYALLSLWYLLRRRRNVHDL PQDAWL RWVLGALCAGGWAVNYL
PFFLMEKTLFLYHYLPALTFQILLLPVVLQHISDHL CRSQLQRSIFSALVVAWYSSACHVNTLRPLTYG
DKSLSPHELKALRWKDSWDILIRKH
    
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6531_e07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_001077366

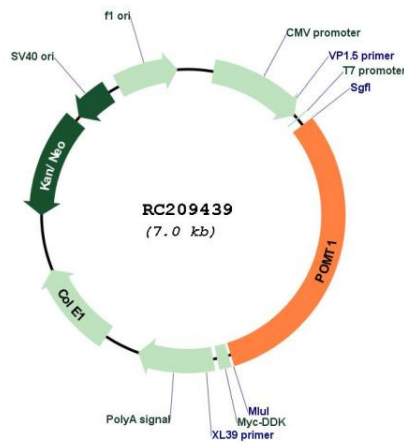
ORF Size: 2178 bp

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](#)

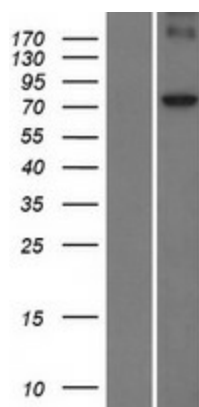
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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 Size:	2928 bp
RefSeq ORF:	2016 bp
Locus ID:	10585
UniProt ID:	<u>Q9Y6A1</u>
Cytogenetics:	9q34.13
Protein Families:	Transmembrane
Protein Pathways:	O-Mannosyl glycan biosynthesis
MW:	82.6 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 RC209439



Western blot validation of overexpression lysate (Cat# [LY421404]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209439 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).