

## Product datasheet for **RG200176**

### **POMGNT1 (NM\_017739) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	POMGNT1 (NM_017739) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	POMGNT1
Synonyms:	gnT-I.2; GNTI.2; GnT I.2; LGMD2O; LGMDR15; MEB; MGAT1.2; RP76
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide  
Sequence:**

>RG200176 representing NM\_017739  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGACGACTGGAAGCCCAGCCCCCTCATCAAGCCCTTTGGGGCTCGGAAGAAGCGGAGCTGGTACCTTA  
 CCTGGAAGTATAAACTGACAAACCAGCGGCCCTGCGGAGATTCTGTGACACAGGGGCCGTGCTTTTCCT  
 GCTGGTACTGTCAATATCAAGTTGATCCTGGACACTCGCGAGCCATCAGTGAAGCCAATGAA  
 GACCCAGAGCCAGAGCAAGACTATGATGAGGCCCTAGGCCGCTGGAGCCCCACGGCGCAGAGGCAGTG  
 GTCCCCGGCGGTCTGGACGTAGAGGTGATTCAAGTCGCAGCAAAGTATATGTGGCAGTGGATGGCAC  
 CACGGTGTGGAGGATGAGGCCCGGAGCAGGGCCGGGCATCCATGTCATTGTCCTCAACCAGGCCACG  
 GGCCACGTGATGGCAAACGTGTGTTTGACACGTACTCACCTCATGAGGATGAGGCCATGGTGTATTCC  
 TCAACATGGTAGCGCCCGCCGAGTGCTCATCTGCACTGTCAAGGATGAGGGCTCCTCCACCTCAAGGA  
 CACAGCCAAGGCTCTGCTGAGGAGCCTGGGCAGCCAGGCTGGCCCTGCCCTGGGCTGGAGGGACACATGG  
 GCCTTCGTGGGACGAAAAGGAGGTCTGTCTTCGGGAGAAAACATTCTAAATCACCTGCCCTCTCTTCT  
 GGGGGGACCCAGTCTGTGAAGACAGATGTGCCATTGAGCTCAGCAGTAGAGGCAGAGTGCCACTGGGC  
 AGACACAGAGCTGAACCGTCGCGCCCGCGCTTCTGCAGCAAAGTTGAGGGCTATGGAAGTGTATGCAGC  
 TGCAAGGACCCACACCCATCGAGTTCAGCCCTGACCCACTCCAGACAACAAGTCTCAATGTGCCTG  
 TGGCTGTCTCAGATGATAACAGTTTTTCATTGACGGCTACTATGAGGAACCCATGGATGTGGTGGCACTG  
 TTTGGTCTGAGGGCATCCAGCATACTCCATCAGCATCAAGAATGCCCGCGTGTCTCAGCACTACAAGG  
 CCAGCCTCACTGCCACTTCAACCTGTTCCGGAGGCCAAGTTGCTGTGTTCTGGAAGAGGACCTGGA  
 CATTGCTGTGGATTTTTTCAGTTTCTGAGCCAATCCATCCACCTACTGGAGGAGGATGACAGCCTGTAC  
 TGCATCTCTGCCTGGAATGACCAGGGTATGAACACACGGCTGAGGACCCAGCACTACTGTACCGTGTGG  
 AGACCATGCCTGGGCTGGGCTGGGTGCTCAGGAGTCTTGTACAAGGAGGAGCTTGAAGCAAGTGGCC  
 TACACCGAAAAGCTCTGGGATTGGGACATGTGGATGCGGATGCCTGAACAACGCCGGGGCCGAGAGTGC  
 ATCATCCCTGACGTTTCCCGATCCTACCACTTTGGCATCGTCGGCCTCAACATGAATGGCTACTTTACG  
 AGGCCTACTTCAAGAAGCACAAGTTCAACACGGTTCAGGTGTCAGCTCAGGAATGTGGACAGTCTGAA  
 GAAAGAAGCTTATGAAGTGAAGTTCACAGGCTGCTCAGTGGGCTGAGGTTCTGGACCACAGCAAGAAC  
 CCTTGTGAAGACTCTTCTGCCAGACACAGGGCCACACCTACGTGGCCTTTATTCGAATGGAGAAAG  
 ATGATGACTTCACCACCTGGACCCAGCTTGCCAAGTGCCTCCATATCTGGGACCTGGATGTGCGTGGCAA  
 CCATCGGGGCTGTGGAGATTGTTTCGGAAGAAGAACCCTTCTGGTGGTGGGGTCCCGGCTTCCCCC  
 TACTCAGTGAAGAAGCCACCCTCAGTACCCCCAATTTCTGGAGCCACCCCAAGGAGGAGGGAGCC  
 CAGGAGCCCCAGAACAGACA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG200176 representing NM\_017739  
Red=Cloning site Green=Tags(s)

```
MDDWKPSPLIKPFGARKKRSWYL TWKYKLTNQRALRRFCQTGAVLFLLVTVIVNIKLILDTRRAISEANE
DPEPEQDYDEALGRLEPPRRRSGP RRVL DVEVYSSRSKVVYVAVDGTTVLEDEAREQGRGIHVIVLNQAT
GHVMAKR VFD TYS PHEDEAMV LFLNMVAPGRVL ICTVKDEGSFHLKDTAKALLRSLGSQAGPALGWRDWTW
AFVGRKGGPVFGEKHSKSPALSSWGD PVLLKTDVPLSSAVEAECHWADTELNRRRRRRC SKVEGYGSVCS
CKDPTPIEFSPDPLPDNKVLNVPVAVIAGNRPNYLYRMLRSLLSAQGVSPQMITVFDIGYEEPM DVVAL
FGLRGIQH TPI SIKNARVSQHYKASLTATFNLFPEAKFAVLEEDLDIAVDFFSFLS QSIHLL EEDDSL Y
CISAWNDQGYEHTAEDPALLYRVETMPGLGWVLRSLYKEELEPKWPTPEKLWDWDMWMMRMEQRRRGREC
IIPDVSRSYHFGIVGLNMNGYFHEAYFKKHKFNTVPGVQLRNVD SLKKEAYEVEVHRL LSEA EVDH SKN
PCEDSFLPDTEGHTYVAFIRMEKDDDFTTWTQLAKCLHIWDL DVRGNHRGLWRLFRKKNHFLVVGVPASP
YSVKKPPSVTPIFLEPPPKEEGAPGAPEQT
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_017739

**ORF Size:** 1980 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\\_017739.2](#), [NP\\_060209.2](#)

**RefSeq Size:** 2753 bp

**RefSeq ORF:** 1983 bp

**Locus ID:** 55624

**UniProt ID:** [Q8WZA1](#)

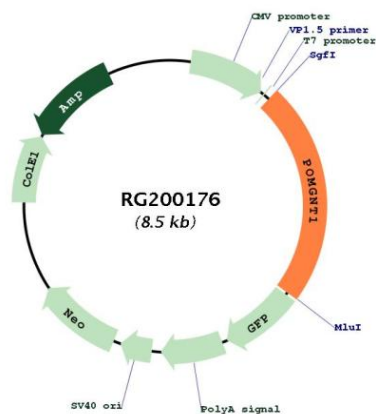
**Cytogenetics:** 1p34.1

**Domains:** GNT-I

**Protein Pathways:** O-Mannosyl glycan biosynthesis

**Gene Summary:** This gene encodes a type II transmembrane protein that resides in the Golgi apparatus. It participates in O-mannosyl glycosylation and is specific for alpha linked terminal mannose. Mutations in this gene may be associated with muscle-eye-brain disease and several congenital muscular dystrophies. Alternatively spliced transcript variants that encode different protein isoforms have been described. [provided by RefSeq, Feb 2014]

## Product images:



Circular map for RG200176