

## Product datasheet for **RG202004**

### **PMM1 (NM\_002676) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PMM1 (NM_002676) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PMM1
Synonyms:	PMM 1; PMMH-22; Sec53
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202004 representing NM_002676 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAGTCACCGCCAGGCAGCCCGCAGGAAGGAGCGCGTCTCTGCCTGTTTGACGTGGACGGGACCC  
TCACGCCGGCTCGCCAGAAAATTGACCCCTGAGGTGGCCGCCTTCTGCAGAAGCTACGAAGTAGAGTGCA  
GATCGGTGTGGTGGCGGCTCTGACTACTGTAAGATCGCTGAGCAGCTGGGTGACGGGGATGAAGTCATT  
GAGAAGTTTGATTATGTGTTTCCGAGAACGGGACGGTGCAGTATAAGCACGGACGACTGCTCTCCAAGC  
AGACCATCCAGAACCACCTGGGGGAGGAGCTGCTGCAGGACTTGATCAACTTCTGCCTCAGCTACATGGC  
CCTGCTCAGGCTGCCCAAGAAGCGTGGAACCTTCATCGAGTTCGGGAATGGCATGCTGAACATCTCGCCC  
ATCGGCCGGAGCTGCACCTGGAGGAGAGGATCGAGTTCTCCGAAGTGGACAAGAAAGAGAAGATCCGGG  
AGAAGTTTCGTGGAAGCCCTGAAAACAGAGTTTGTCTGGCAAAGGGCTGAGGTTCTCTCAGGAGGCATGAT  
CAGCTTTGACGCTTCCCCGAGGGCTGGGACAAGCGCTACTGCCTGGATAGCCTGGACCAGGACAGCTTC  
GACACCATCCACTTCTTTGGGAACGAGACTAGCCCTGGTGGGAACGACTTTGAGATCTTTGCCGACCCCC  
GGACTGTTGGCCACAGCGTGGTGTCTCCTCAGGACACGGTGCAGCGATGCCGGGAGATTTTCTCCAGA  
GACAGCTCATGAGGCG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



**Protein Sequence:** >RG202004 representing NM\_002676  
 Red=Cloning site Green=Tags(s)

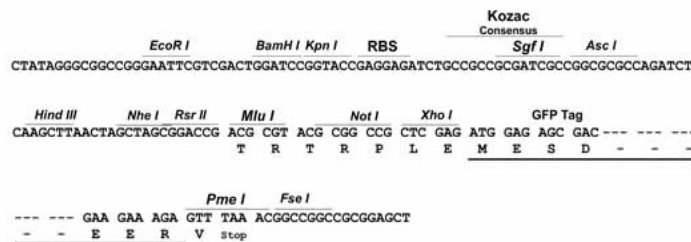
MAVTAQAARRKERVLCFLFDVDGTLTPARQKIDPEVA AFLQKLRSRVQIGVVGGSDYCKIAEQLGDGDEVI  
 EKFDYVFAENGTVQYKHGRLLSKQTIQNHLELLQDLINFCLSYMALLRLPKKRGTFFIEFRNGMLNISP  
 IGRSCTLEERIEFSELDKKEKIREKFVEALKTEFAGKGLRF SRGGMISFDVPEGWDKRYCLDSLDDQDSF  
 DTIHFFGNETSPGGNDFEIFADPRTVGHSVVSPQDTVQRCEIFFPETAHEA

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**ACCN:** NM\_002676

**ORF Size:** 786 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\\_002676.3](#)

**RefSeq Size:** 1210 bp

**RefSeq ORF:** 789 bp

**Locus ID:** 5372

**UniProt ID:** [Q92871](#)

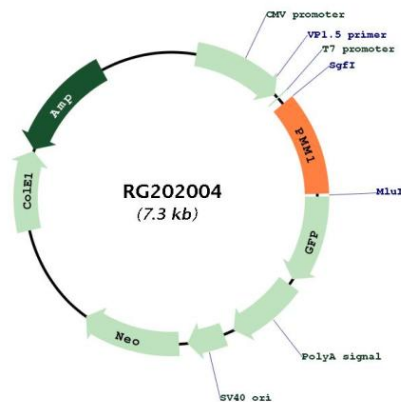
**Cytogenetics:** 22q13.2

**Domains:** PMM

**Protein Pathways:** Amino sugar and nucleotide sugar metabolism, Fructose and mannose metabolism, Metabolic pathways

**Gene Summary:** Phosphomannomutase catalyzes the conversion between D-mannose 6-phosphate and D-mannose 1-phosphate which is a substrate for GDP-mannose synthesis. GDP-mannose is used for synthesis of dolichol-phosphate-mannose, which is essential for N-linked glycosylation and thus the secretion of several glycoproteins as well as for the synthesis of glycosyl-phosphatidyl-inositol (GPI) anchored proteins. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RG202004