Product datasheet for RC202004

PMM1 (NM_002676) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PMM1 (NM_002676) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PMM1
Synonyms:	PMM 1; PMMH-22; Sec53
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202004 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAGTCACCGCCCAGGCAGCCCGCAGGAAGGAGCGCGTCCTCTGCCTGTTTGACGTGGACGGGACCC
TCACGCCGGCTCGCCAGAAAATTGACCCTGAGGTGGCCGCCTTCCTGCAGAAGCTACGAAGTAGAGTGCA
GATCGGTGTGGTGGGCGGCTCTGACTACTGTAAGATCGCTGAGCAGCTGGGTGACGGGGATGAAGTCATT
GAGAAGTTTGATTATGTGTTTGCCGAGAACGGGACGGTGCAGTATAAGCACGGACGACTGCTCTCCAAGC
AGACCATCCAGAACCACCTGGGGGAGGAGCTGCTGCAGGACTTGATCAACTTCTGCCTCAGCTACATGGC
CCTGCTCAGGCTGCCCAAGAAGCGTGGAACCTTCATCGAGTTCCGGAATGGCATGCTGAACATCTCGCCC
ATCGGCCGGAGCTGCACCCTGGAGGAGAGGATCGAGTTCTCCGAACTGGACAAGAAAGAGAAGATCCGGG
AGAAGTTCGTGGAAGCCCTGAAAACAGAGTTTGCTGGCAAAGGGCTGAGGTTCTCTCGAGGAGGCATGAT
CAGCTTTGACGTCTTCCCCGAGGGCTGGACAAGCGCTACTGCCTGGATAGCCTGGACCAGGACAGCTTC
GACACCATCCACTTCTTTGGGAACGAGACTAGCCCTGGTGGGAACGACTTTGAGATCTTTGCCGACCCCC
GGACTGTTGGCCACAGCGTGGTGTCTCCTCAGGACACGGTGCAGCGATGCCGGGGAGATTTTCTTCCCAGA
GACAGCTCATGAGGCG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202004 protein sequence
Red=Cloning site Green=Tags(s)

MAVTAQAARRKERVLCLFDVDGTLTPARQKIDPEVAAFLQKLRSRVQIGVVGGSDYCKIAEQLGDGDEVI
EKFDYVFAENGTVQYKHGRLLSKQTIQNHLGEELLQDLINFCLSYMALLRLPKKRGTFIEFRNGMLNISP
IGRSCTLEERIEFSELDKKEKIREKFVEALKTEFAGKGLRFSRGGMISFDVFPEGWDKRYCLDSLDQDSF
DTIHFFGNETSPGGNDFEIFADPRTVGHSVVSPQDTVQRCREIFFPETAHEA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6308_d06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:
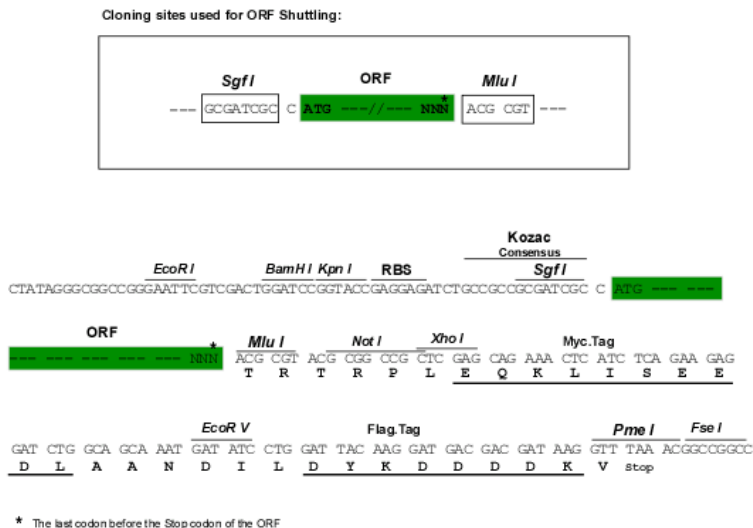
ACCN: NM_002676

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).

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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:	1295 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
MW:	29.7 kDa
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:
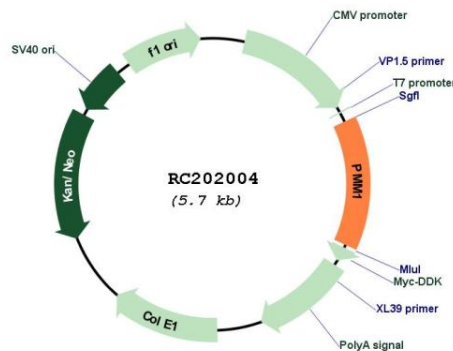
Circular map for RC202004
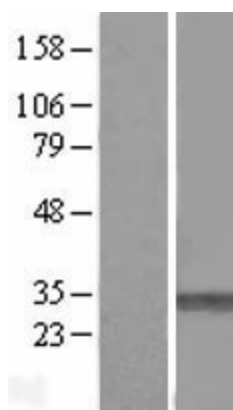
Western blot validation of overexpression lysate (Cat# [LY419180]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202004 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).
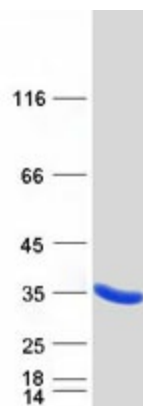
Coomassie blue staining of purified PMM1 protein (Cat# [TP302004]). The protein was produced from HEK293T cells transfected with PMM1 cDNA clone (Cat# RC202004) using MegaTran 2.0 (Cat# [TT210002]).

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