**OriGene Technologies, Inc.**
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

# Product datasheet for RC202817

## DPM1 (NM_003859) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | DPM1 (NM_003859) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | DPM1 |
| **Synonyms:** | CDGIE; MPDS |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

>RC202817 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCTCCTTGGAAGTCAGTCGTAGTCCTCGCAGGTCTCGGCGGGAGCTGGAAGTGCGCAGTCCACGAC
AGAACAAATATTCGGTGCTTTTACCTACCTACAACGAGCGCGAGAACCTGCCGCTCATCGTGTGGCTGCT
GGTGAAAAGCTTCTCCGAGAGTGGAATCAACTATGAAATTATAATCATAGATGATGGAAGCCCAGATGGA
ACAAGGGATGTTGCTGAACAGTTGGAGAAGATCTATGGGTCAGACAGAATTCTTCTAAGACCACGAGAGA
AAAAGTTGGGACTAGGAACTGCATATATTCATGGAATGAAACATGCCACAGGAAACTACATCATTATTAT
GGATGCTGATCTCTCACACCATCCAAAATTTATTCCTGAATTTATTAGGAAGCAAAAGGAGGGTAATTTT
GATATTGTCTCTGGAACTCGCTACAAAGGAAATGGAGGTGTATATGGCTGGGATTTGAAAAGAAAAATAA
TCAGCCGTGGGGCCAATTTTTTAACTCAGATCTTGCTGAGACCAGGAGCATCTGATTTAACAGGAAGTTT
CAGATTATACCGAAAAGAAGTTCTAGAGAAATTAATAGAAAAATGTGTTTCTAAAGGCTACGTCTTCCAG
ATGGAGATGATTGTTCGGGCAAGACAGTTGAATTATACTATTGGCGAGGTTCCAATATCATTTGTGGATC
GTGTTTATGGTGAATCCAAGTTGGGAGGAAATGAAATAGTATCTTTCTTGAAAGGATTATTGACTCTTTT
TGCTACTACA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



View online »

**Protein Sequence:**

>RC202817 protein sequence
Red=Cloning site Green=Tags(s)

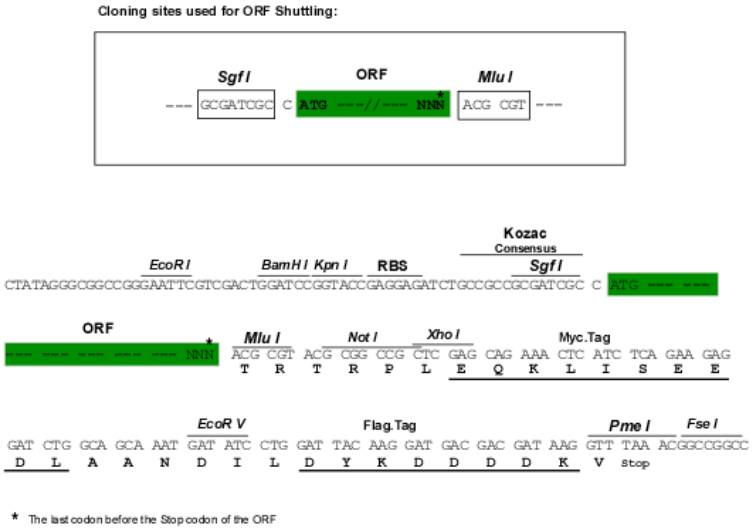
MASLEVSRSPRRSRRELEVRSPRQNKYSVLLPTYNERENLPLIVWLLVKSFSESGINYEIIIIDDGSPDG
TRDVAEQLEKIYGSDRILLRPREKKLGLGTAYIHGMKHATGNYIIIMDADLSHHPKFIPEFIRKQKEGNF
DIVSGTRYKGNGGVYGWDLKRKIISRGANFLTQILLRPGASDLTGSFRLYRKEVLEKLIEKCVSKGYVFQ
MEMIVRARQLNYTIGEVPISFVDRVYGESKLGGNEIVSFLKGLLTLFATT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** https://cdn.origene.com/chromatograms/mk6194_a09.zip

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




**ACCN:** NM_003859

**ORF Size:** 780 bp

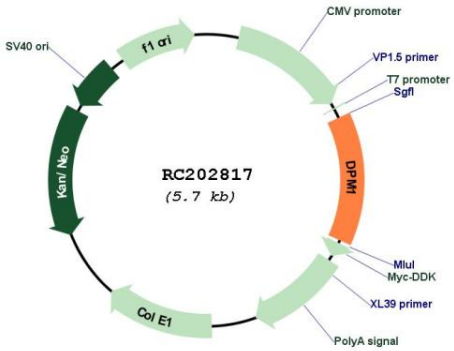
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

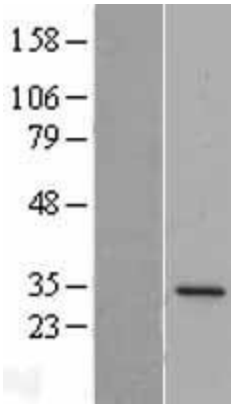
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

| | |
|---|---|
| **Reconstitution Method:** | 1. Centrifuge at 5,000xg for 5min.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_003859.3 |
| **RefSeq Size:** | 1047 bp |
| **RefSeq ORF:** | 783 bp |
| **Locus ID:** | 8813 |
| **UniProt ID:** | O60762 |
| **Cytogenetics:** | 20q13.13 |
| **Domains:** | Glycos_transf_2 |
| **Protein Pathways:** | Metabolic pathways, N-Glycan biosynthesis |
| **MW:** | 29.6 kDa |
| **Gene Summary:** | Dolichol-phosphate mannose (Dol-P-Man) serves as a donor of mannosyl residues on the lumenal side of the endoplasmic reticulum (ER). Lack of Dol-P-Man results in defective surface expression of GPI-anchored proteins. Dol-P-Man is synthesized from GDP-mannose and dolichol-phosphate on the cytosolic side of the ER by the enzyme dolichyl-phosphate mannosyltransferase. Human DPM1 lacks a carboxy-terminal transmembrane domain and signal sequence and is regulated by DPM2. Mutations in this gene are associated with congenital disorder of glycosylation type Ie. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2015] |

## Product images:




Circular map for RC202817




Western blot validation of overexpression lysate (Cat# [LY401268]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202817 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).