

## Product datasheet for **RC203919**

### DPM2 (NM\_003863) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** DPM2 (NM\_003863) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** DPM2  
**Synonyms:** CDG1U  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC203919 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCACGGGGACAGACCAGGTGGTGGGACTCGGCCTCGTCGCCGTTAGCCTGATCATCTTCACCTACT  
ACACCGCCTGGGTGATTCTCTTGCCATTCATCGACAGTCAGCATGTCATCCACAAGTATTCCTGCCCG  
AGCCTATGCTGTCGCCATCCACTGGCTGCAGGCCTCTGCTGCTCTGTTTGTGGGACTGTTTCATCTCC  
TACGTGATGCTGAAGAGCAAGAGAGTGACCAAGAAGGCTCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC203919 protein sequence  
Red=Cloning site Green=Tags(s)  
MATGTDQVVGLGLVAVSLIIFTYYTAWVILLPFIDSQHVHVKYFLPRAYAVAIPLAAGLLLLLVGLFIS  
YVMLKSKRVTKKAQ

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6359\\_f05.zip](https://cdn.origene.com/chromatograms/mk6359_f05.zip)

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**


**ACCN:** NM\_003863

**ORF Size:** 252 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\\_003863.4](#)

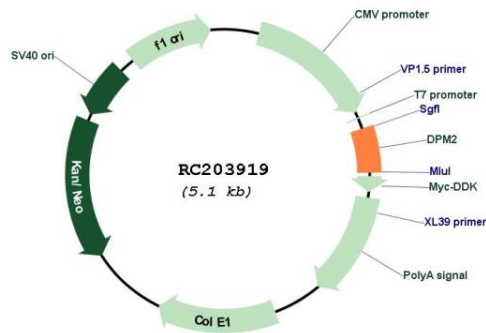
**RefSeq Size:** 1561 bp

**RefSeq ORF:** 255 bp

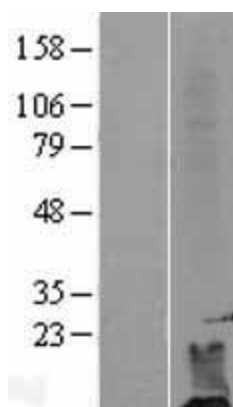
**Locus ID:** 8818

**UniProt ID:** [O94777](#)  
**Cytogenetics:** 9q34.11  
**Protein Families:** Transmembrane  
**Protein Pathways:** Glycosylphosphatidylinositol(GPI)-anchor biosynthesis, Metabolic pathways, N-Glycan biosynthesis  
**MW:** 9.3 kDa  
**Gene Summary:** Dolichol-phosphate mannose (Dol-P-Man) serves as a donor of mannosyl residues on the luminal 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. The protein encoded by this gene is a hydrophobic protein that contains 2 predicted transmembrane domains and a putative ER localization signal near the C terminus. This protein associates with DPM1 in vivo and is required for the ER localization and stable expression of DPM1 and also enhances the binding of dolichol-phosphate to DPM1. [provided by RefSeq, Jul 2008]

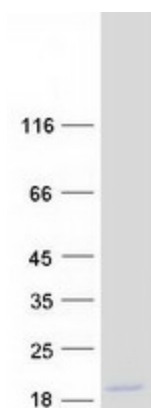
**Product images:**



Circular map for RC203919



Western blot validation of overexpression lysate (Cat# [LY418387]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203919 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DPM2 protein (Cat# [TP303919]). The protein was produced from HEK293T cells transfected with DPM2 cDNA clone (Cat# RC203919) using MegaTran 2.0 (Cat# [TT210002]).