

## Product datasheet for RC227174

### PTPMT1 (NM\_001143984) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** PTPMT1 (NM\_001143984) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** PTPMT1  
**Synonyms:** DUSP23; MOSP; PLIP; PNAS-129  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC227174 representing NM\_001143984  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCGGCCACCGCGCTGCTGGAGGCCGGCCTGGCGGGGTGCTCTTCTACCCGACGCTGCTCTACACCC  
 TGTTCCGCGGGAAGGTGCCGGTCCGGGCGCACCGGACTGGTACCACCGCATCGACCCACCGTGTCTGCT  
 GGGCGCGTCCGTTGCGGAGCTTGACGCGCCAGGTGAGCCGGGCGGGAGCCCGGGCCCTGCCCGT  
 CCCC GCCGCTCCGTCCTGTCGGGCGCTGGGGTCTCCACCGTCTTTGCTGAGCCACCTCTTTGCCCTCGG  
 CAGCTGGTACAGGACGAGAACGTGCGCGGGGTGATCACCATGAACGAGGAGTACGAGACGAGGTTCTCTGT  
 GCAACTCTTACAGGTGCACAAATGGAGTCCAGAGGAGGCTGTAAGAGCCATCGCCAAGATCCGGTCATA  
 CATCCACATCAGGCTGGCCAGCTGGATGTTCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC227174 representing NM\_001143984  
 Red=Cloning site Green=Tags(s)

MAATALLEAGLARVLFYPTLLYLFRGKVPGRAHRDWHYHRIDPTVLLGALPLRSLTRQVSRAGEPGLPR  
 PRRSVPVGPLGSPSLLSHLFASAAGTGRERARGDHHHERGVRRDEVPVQLFTGAQMESRGGCKSHRQDPVI  
 HPHQAWPAGCS

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1250\\_a10.zip](https://cdn.origene.com/chromatograms/ja1250_a10.zip)



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_001143984

ORF Size: 453 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM\\_001143984.1](#), [NP\\_001137456.1](#)

RefSeq ORF: 456 bp

Locus ID: 114971

UniProt ID: [Q8WUK0](#)

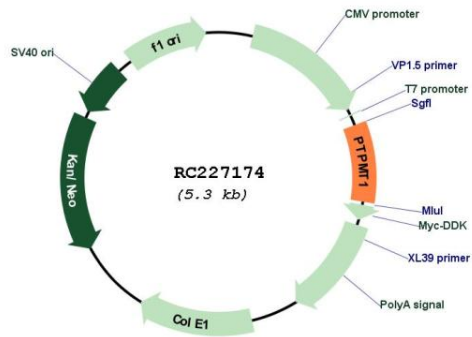
Cytogenetics: 11p11.2

Protein Families: Druggable Genome

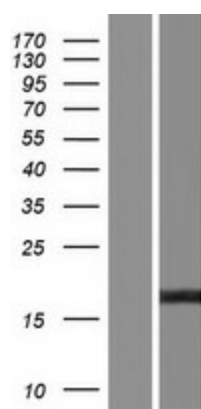
MW: 16.3 kDa

**Gene Summary:** Lipid phosphatase which dephosphorylates phosphatidylglycerophosphate (PGP) to phosphatidylglycerol (PG) (By similarity). PGP is an essential intermediate in the biosynthetic pathway of cardiolipin, a mitochondrial-specific phospholipid regulating the membrane integrity and activities of the organelle (By similarity). Has also been shown to display phosphatase activity toward phosphoprotein substrates, specifically mediates dephosphorylation of mitochondrial proteins, thereby playing an essential role in ATP production (By similarity). Has probably a preference for proteins phosphorylated on Ser and/or Thr residues compared to proteins phosphorylated on Tyr residues (By similarity). Probably involved in regulation of insulin secretion in pancreatic beta cells (By similarity). May prevent intrinsic apoptosis, probably by regulating mitochondrial membrane integrity (PubMed:24709986).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for RC227174



Western blot validation of overexpression lysate (Cat# [LY428444]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227174 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).