

## Product datasheet for **RG215376**

### PTPMT1 (NM\_175732) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** PTPMT1 (NM\_175732) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** PTPMT1  
**Synonyms:** DUSP23; MOSP; PLIP; PNAS-129  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG215376 representing NM\_175732  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGGCCACCGCGCTGCTGGAGGCCGGCCTGGCGGGGTGCTCTTCTACCCGACGCTGCTCTACACCC  
TGTTCCGCGGGAAGGTGCCGGTCCGGGCGCACCGGACTGGTACCACCGCATCGACCCACCGTGTCTGT  
GGGCGCGTCCGTTGCGGAGCTTGACGCGCCAGCTGGTACAGGACGAGAACGTGCGCGGGGTGATCACC  
ATGAACGAGGAGTACGAGACGAGGTTCTGTGCAACTCTTACAGGAGTGAAGAGACTAGGAGTCGAGC  
AGCTGCGGCTCAGCACAGTAGACATGACTGGGATCCCCACCTTGGACAACCTCCAGAAGGGAGTCCAATT  
TGCTCTCAAGTACCAGTCGCTGGCCAGTGTGTTACGTGCAATTGAAGGCTGGGCGCTCCAGGAGTGCC  
ACTATGGTGGCAGCATACCTGATTCAGGTGCACAAATGGAGTCCAGAGGAGGCTGTAAGGCCATCGCCA  
AGATCCGGTCATACATCCACATCAGGCCTGGCCAGCTGGATGTTCTTAAAGAGTCCACAAGCAGATTAC  
TGCACGGGCAACAAAGGATGGGACTTTTGTCAATTTCAAAGACA

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG215376 representing NM\_175732  
Red=Cloning site Green=Tags(s)

MAATALLEAGLARVLFYPTLLYLFRGKVPGRAHRDWHYHRIDPTVLLGALPLRSLTRQLVQDENVRGVIT  
MNEEYETRFLCNSSQEWKRLGVEQLRLSTVDMTGIPDLNLQKGVQFALKYQSLGQCYYVHCKAGRSRSA  
TMVAAYLIQVHKWSPEEAVRAIAKIRSYIHIRPGQLDVLKEFHQITARATKDGTFVISK

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI

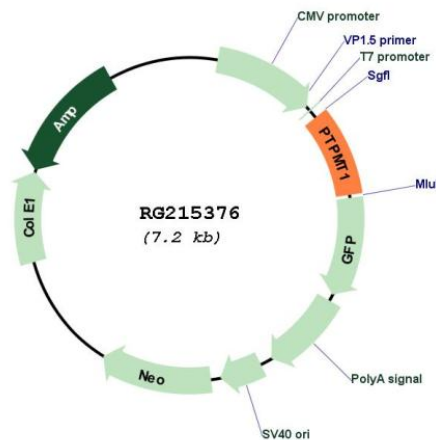


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Cloning Scheme:



Plasmid Map:



ACCN: NM\_175732

ORF Size: 603 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\\_175732.3](#)

**RefSeq Size:** 859 bp

**RefSeq ORF:** 606 bp

**Locus ID:** 114971

**UniProt ID:** [Q8WUK0](#)

**Cytogenetics:** 11p11.2

**Protein Families:** Druggable Genome

**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]