

## Product datasheet for **RG200698**

### PRPS1 (NM\_002764) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PRPS1 (NM_002764) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PRPS1
Synonyms:	ARTS; CMTX5; DFN2; DFNX1; PPRibP; PRS-I; PRSI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG200698 representing NM_002764 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCGAATATCAAAATCTTCAGCGGCAGCTCCCACCAGGACTTATCTCAGAAAATTGCTGACCGCCTGG  
GCCTGGAGCTAGGCAAGGTGGTACTAAGAAATTCAGCAACCAGGAGACCTGTGTGGAAATTGGTAAAAG  
TGTACGTGGAGAGGATGTCTACATTGTTTCAGAGTGGTTGTGGCAAAATCAATGACAATTTAATGGAGCTT  
TTGATCATGATTAATGCCTGCAAGATTGCTTCAGCCAGCCGGTTACTGCAGTCATCCCATGCTTCCCTT  
ATGCCCGCAGGATAAGAAAGATAAGAGCCGGGCGCAATCTCAGCCAAGCTTGTGCAAAATATGCTATC  
TGTAGCAGGTGCAGATCATATTACCATGGACCTACATGCTTCTCAAATTCAGGGCTTTTTTGATATC  
CCAGTAGACAATTTGATGCAGAGCCGGCTGTCCTAAAGTGGATAAGGGAGAATATCTCTGAGTGGAGGA  
ACTGCACTATTGTCTCACCTGATGCTGGTGGAGCTAAGAGAGTGACCTCCATTGCAGACAGGCTGAATGT  
GGACTTTGCCTTGATTACAAAGAACGGAAGAAGGCCAATGAAGTGGACCGCATGGTGTGTGGGAGAT  
GTGAAGGATCGGGTGGCCATCCTTGTGGATGACATGGCTGACACTGTGGCACAATCTGCCATGCAGCTG  
ACAAACTTCTCTCAGCTGGCGCCACCAGAGTTTATGCCATCTTGACTCATGGAATCTTCTCCGGTCTGC  
TATTTCTCGCATCAACAACGCATGCTTTGAGGCAGTAGTAGTACCAATACCATACTCAGGAGGACAAG  
ATGAAGCATTGCTCCAAAATACAGGTGATTGACATCTATGATCCTTGCAGAAGCCATCAGGAGAACTC  
ACAATGGAGAATCCGTTTCTTACCTATTACGCCATGTCCTTTA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG200698 representing NM\_002764  
Red=Cloning site Green=Tags(s)

MPNIKIFSGSSHQDL S QKIADRLGLEL GKVVTKKFSNQETCVEIGESV RGEDVYIVQSGCGEINDNL MEL  
 LIMINACKIASASRVTAVIPCFPYARQDKKDSRAPISAKLVANMLSVAGADHII TMDLHASQIQGFFDI  
 PVDNLYAEPV LKWIRENISEWRNCTIVSPDAGGAKRVTSIADRLNVDFAL IHKERRKANEVDRMVLVGD  
 VKDRVAILVDDMADTCGTICHAADKLLSAGATRVYAIL THGIFSGPAISRINNACFEAVVNTNTIPQEDK  
 MKHC SKIQVIDISMILAEAIRRTHNGESVSYLFSHVPL

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_002764

**ORF Size:** 954 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\\_002764.4](#)

**RefSeq Size:** 2078 bp

**RefSeq ORF:** 957 bp

**Locus ID:** 5631

**UniProt ID:** [P60891](#)

**Cytogenetics:** Xq22.3

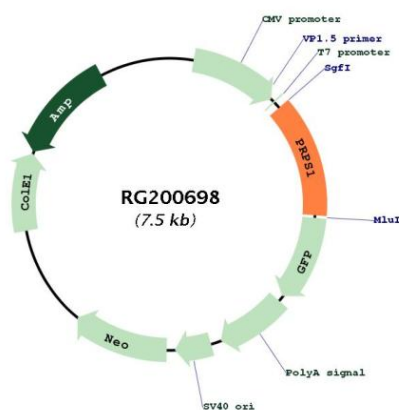
**Domains:** Pribosyltran

**Protein Families:** Druggable Genome

**Protein Pathways:** Metabolic pathways, Pentose phosphate pathway, Purine metabolism

**Gene Summary:** This gene encodes an enzyme that catalyzes the phosphoribosylation of ribose 5-phosphate to 5-phosphoribosyl-1-pyrophosphate, which is necessary for purine metabolism and nucleotide biosynthesis. Defects in this gene are a cause of phosphoribosylpyrophosphate synthetase superactivity, Charcot-Marie-Tooth disease X-linked recessive type 5 and Arts Syndrome. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2011]

### Product images:



Circular map for RG200698