

Product datasheet for **RG231683**

PRPS1 (NM_001204402) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PRPS1 (NM_001204402) 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: >RG231683 representing NM_001204402
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGCTTGTTGGGAGATGTGAAGGATCGGGTGGCCATCCTTGTGGATGACATGGCTGACACTTGTGGCA
CAATCTGCCATGCAGCTGACAACTTCTCTCAGCTGGCGCCACCAGATTTATGCCATCTTGACTCATGG
AATCTTCTCCGGTCTGCTATTTCTCGCATCAACAACGCATGCTTTGAGGCAGTAGTAGTACCAATACC
ATACCTCAGGAGACAAGATGAAGCATTGCTCCAAAATACAGGTATTGACATCTCTATGATCCTTGACG
AAGCCATCAGGAGAACTACAATGGAGAATCCGTTTCTTACCTATTCAGCCATGTCCCTTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG231683 representing NM_001204402
Red=Cloning site Green=Tags(s)
MVLVGDVKDRVAILVDDMADTCGTICHAADKLLSAGATRVYAILTHGIFSGPAISRINNACFEAVVVTNT
IPQEDKMKHCKSIQVIDISMILAEAIRRTHNGESVSYLFSHVPL

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

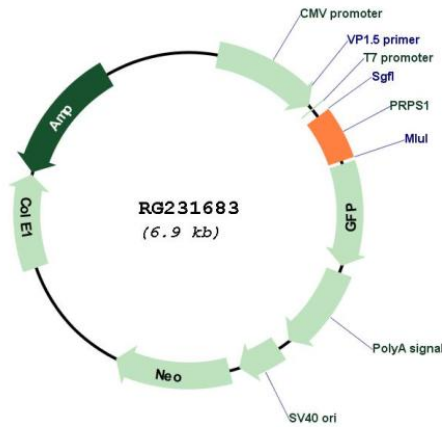


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001204402

ORF Size: 342 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:	<ol style="list-style-type: none">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:	<u>NM_001204402.1</u> , <u>NP_001191331.1</u>
RefSeq Size:	1748 bp
RefSeq ORF:	345 bp
Locus ID:	5631
UniProt ID:	<u>P60891</u>
Cytogenetics:	Xq22.3
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]