

## Product datasheet for **RC231683**

### PRPS1 (NM\_001204402) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** PRPS1 (NM\_001204402) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** PRPS1  
**Synonyms:** ARTS; CMTX5; DFN2; DFNX1; PPRibP; PRS-I; PRSI  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RC231683 representing NM\_001204402  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

**ATGGTGCTTGTTGGGAGATGTGAAGGATCGGGTGGCCATCCTTGTGGATGACATGGCTGACACTTGTGGCA  
CAATCTGCCATGCAGCTGACAACTTCTCTCAGCTGGCGCCACCAGAGTTTATGCCATCTTGACTCATGG  
AATCTTCTCCGGTCTGCTATTTCTCGCATCAACAACGCATGCTTTGAGGCAGTAGTAGCACCAATACC  
ATACCTCAGGAGGACAAGATGAAGCATTGCTCCAAAATACAGGTGATTGACATCTCTATGATCCTTGCGAG  
AAGCCATCAGGAGAACTACAATGGAGAATCCGTTTCTTACCTATTCAGCCATGTCCCTTAA**

**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA**

**Protein Sequence:** >RC231683 representing NM\_001204402  
Red=Cloning site Green=Tags(s)

MVLVGDVKDRVAILVDDMADTCGTICHAADKLLSAGATRVYAILTHGIFSGPAISRINNACFEAVVNT  
IPQEDKMKHCSKIQVIDISMILAEAIRRTHNGESVSYLFSHVPL

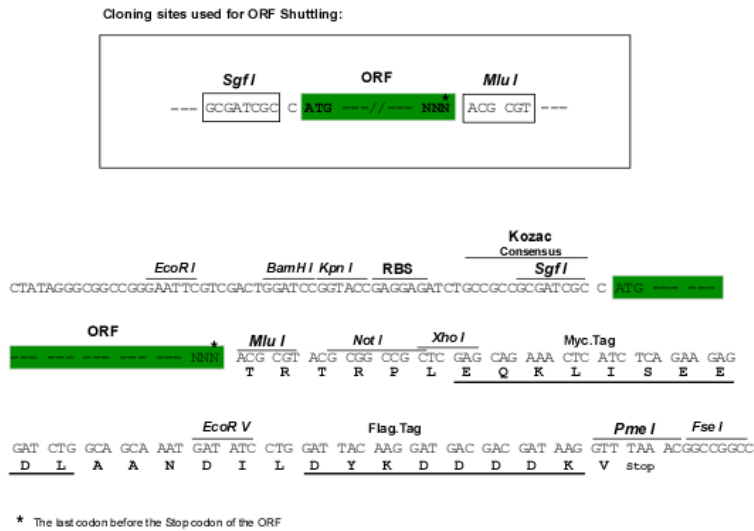
**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Restriction Sites:** Sgfl-MluI

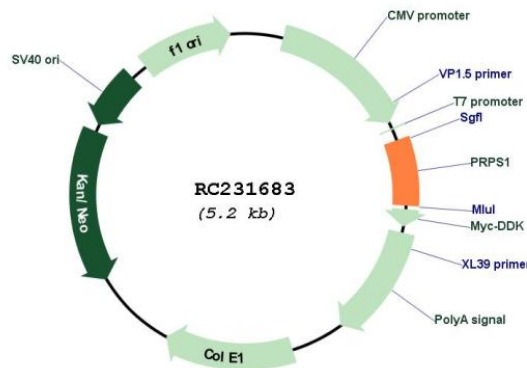


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Cloning Scheme:



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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001204402.1</a> , <a href="#">NP_001191331.1</a>
<b>RefSeq Size:</b>	1748 bp
<b>RefSeq ORF:</b>	345 bp
<b>Locus ID:</b>	5631
<b>UniProt ID:</b>	<a href="#">P60891</a>
<b>Cytogenetics:</b>	Xq22.3
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Metabolic pathways, Pentose phosphate pathway, Purine metabolism
<b>MW:</b>	12.8 kDa
<b>Gene Summary:</b>	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]