

Product datasheet for **RC200698**

PRPS1 (NM_002764) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRPS1 (NM_002764) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PRPS1
Synonyms:	ARTS; CMTX5; DFN2; DFNX1; PPRibP; PRS-I; PRSI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200698 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGAATCAAAATCTTCAGCGGCAGCTCCCACCAGGACTTATCTCAGAAAATTGCTGACCGCCTGG
GCCTGGAGCTAGGCAAGGTGGTACTAAGAAATTCAGCAACCAGGAGACCTGTGTGGAAATTGGTAAAAG
TGTACGTGGAGAGGATGTCTACATTGTTTCAGAGTGGTTGTGGCAAAATCAATGACAATTTAATGGAGCTT
TTGATCATGATTAATGCCTGCAAGATTGCTTCAGCCAGCCGGTTACTGCAGTCATCCCATGCTTCCCTT
ATGCCCGCAGGATAAGAAAGATAAGAGCCGGGCGCAATCTCAGCCAAGCTTGTGCAAAATATGCTATC
TGTAGCAGGTGCAGATCATATTACCATGGACCTACATGCTTCTCAAATTCAGGGCTTTTTTGATATC
CCAGTAGACAATTTGATGCAGAGCCGGCTGTCCTAAAGTGGATAAGGGAGAATATCTCTGAGTGGAGGA
ACTGCACTATTGTCTCACCTGATGCTGGTGGAGCTAAGAGAGTGACCTCCATTGCAGACAGGCTGAATGT
GGACTTTGCCTTGATTCAAAAGAACGGAAGAAGGCCAATGAAGTGGACCGCATGGTGTGTGGGAGAT
GTGAAGGATCGGGTGGCCATCCTTGTGGATGACATGGCTGACACTGTGGCACAATCTGCCATGCAGCTG
ACAAACTTCTCTCAGCTGGCGCCACCAGAGTTTATGCCATCTTGACTCATGGAATCTTCTCCGGTCTGC
TATTTCTCGCATCAACAACGCATGCTTTGAGGCAGTAGTAGTACCAATACCATACTCAGGAGGACAAG
ATGAAGCATTGCTCCAAAATACAGGTGATTGACATCTCTATGATCCTTGCAGAAGCCATCAGGAGAACTC
ACAATGGAGAATCCGTTTCTTACCTATTCAGCCATGTCCTTTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200698 protein sequence
Red=Cloning site Green=Tags(s)

MPNIKIFSGSSHQDL SQKIADRLGLELGKVVTKKFSNQETCVEIGESVRGEDVYIVQSGCGEINDNLMEL
 LIMINACKIASASRVTVAVIPCFPYARQDKKDKSRAPISAKLVANMLSVAGADHIIITMDLHASQIQGFFDI
 PVDNLYAEPVAVLKWIRENISEWRNCTIVSPDAGGAKRVTSIADRLNVDFALIHKERKKANEVDRMVLVGD
 VKDRVAILVDDMADTCGTICHAADKLLSAGATRVYAILTHGIFSGPAISRINNACFEAVVVTNTIPQEDK
 MKHCSKIQVIDISMILAEAIRRTHNGESVSYLFSHVPL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6082_d08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002764

ORF Size: 954 bp

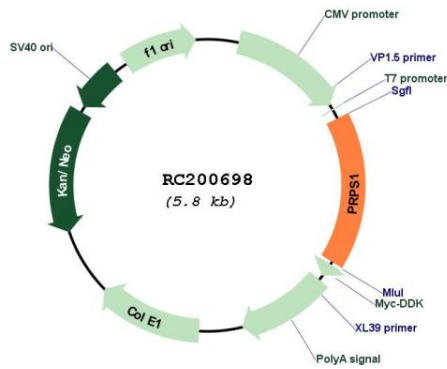
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

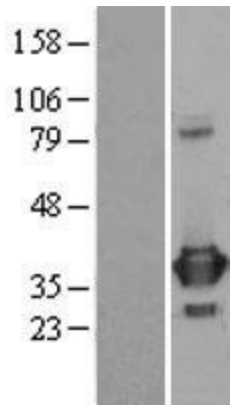
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<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:	NM_002764.4
RefSeq Size:	2156 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
MW:	34.8 kDa
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]

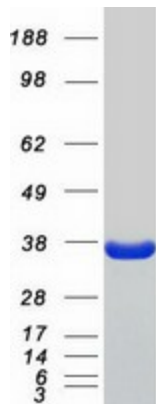
Product images:



Circular map for RC200698



Western blot validation of overexpression lysate (Cat# [LY400979]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200698 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PRPS1 protein (Cat# [TP300698]). The protein was produced from HEK293T cells transfected with PRPS1 cDNA clone (Cat# RC200698) using MegaTran 2.0 (Cat# [TT210002]).