

Product datasheet for RC219227

PRPS2 (NM_001039091) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRPS2 (NM_001039091) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PRPS2
Synonyms:	PRSII
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219227 representing NM_001039091 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCAACATCGTGCTGTTTCAGCGGCAGCTCGCATCAGGACCTGTCCCAGCGCGTGGCCGACCGCCTGG
GCCTGGAGCTGGCAAGGTGGTCACGAAGAAGTTCAGCAACCAGGAGACCAGCGTGGAGATTGGTAAAAG
CGTGAGAGGGGAAGATGTCTACATCATCCAGAGCGGCTGCGGGGAAATTAACGACAACCTGATGAACTC
CTCATCATGATCAATGCCTGCAAGATTGCGTCATCATCCAGAGTAAGTCCCGTATCCCCTGTTTCCCAT
ACGCCCGACAAGATAAAAAGGACAAGGTAGGAGAGAGTCTGCCCCAATTTCTGCAAAACTGTGGCCAA
TATGCTGTGCGGTGGCTGGGGCGGATCACATCATACCATGGACCTGCATGCTTCTCAGATACAGGGATTC
TTTGATATTCCTGTGGATAATTTGTATGCGGAGCCCGCAGTCTCGCAGTGGATTCGGGAAAAATTGCCG
AGTGGAAGAACTGTATCATTGTTTCACCTGACGCAGGGGGAGCCAAAAGGGTTACATCAATTGCAGACAG
GTTGAATGTGGAATTTGCTTTGATCCACAAAGAGAGGAAGAAGGCGAATGAAGTGGACCGGATGGTCCTG
GTGGGCGACGTGAAGGACCGTGTGGCCATCCTCGTGGATGACATGGCTGACACTTGGCGCACCATCTGCC
ATGCTGCGGACAAGCTGCTGTGAGCTGGAGCCACCAAAGTGTATGCTATCCTTACCCATGGGATCTTCTC
TGGACCAGCTATTTCCAGAATAAATAATGCCGCTTTGAGGCTGTTGTGTCGTCACAAACACAATTCGCAA
GAGGACAAAATGAAACTGCACCAAGATTCAGGTCATTGACATTTCCATGATCTTGGCCGAAGCAATCC
GAAGGACACACAATGGGAATCCGTGCTCCTACCTGTTTCAGCCATGTCCCGCTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC219227 representing NM_001039091
 Red=Cloning site Green=Tags(s)

MPNIVLFSGSSHQDL SQRVADRLGLELGKVVTKKFSNQETSVEIGESVRGEDVYIIQSGCGEINDNLMEL
 LIMINACKIASSSRVTAVIPCFPYARQDKKDKVGESRAPISAKLVANMLSVAGADHIITMDLHASQIQGF
 FDIPVDNLYAEPVAVLQWIREINIAEWKNCIIIVSPDAGGAKRVTSIADRLNVEFALIHKERRKANEVDRMVL
 VGDVVKDRVAILVDDMADTCGTICHAADKLLSAGATKVYAILTHGIFSGPAISRINNAAFEAVVVTNTIPQ
 EDKMKHCTKIQVIDISMILAEAIRRTHNGESVSYLFSHVPL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8021_h07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001039091

ORF Size: 963 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_001039091.2](#), [NP_001034180.1](#)

RefSeq Size: 2518 bp

RefSeq ORF: 966 bp

Locus ID: 5634

UniProt ID: [P11908](#)

Cytogenetics: Xp22.2

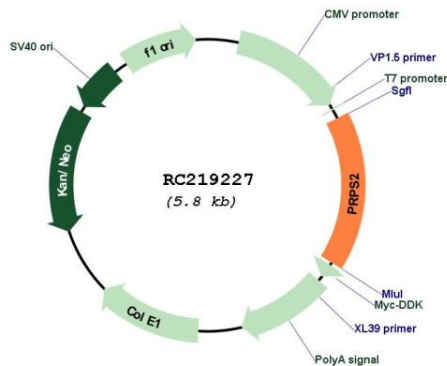
Protein Families: Druggable Genome

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

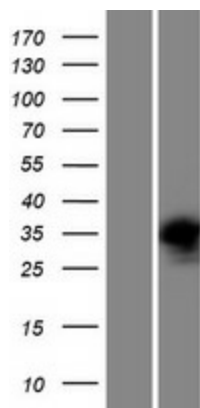
MW: 34.9 kDa

Gene Summary: This gene encodes a phosphoribosyl pyrophosphate synthetase that plays a central role in the synthesis of purines and pyrimidines. The encoded protein catalyzes the synthesis of 5-phosphoribosyl 1-pyrophosphate from ATP and D-ribose 5-phosphate. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Mar 2010]

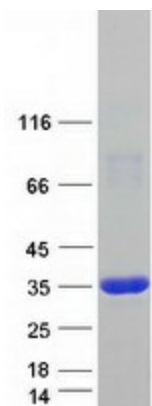
Product images:



Circular map for RC219227



Western blot validation of overexpression lysate (Cat# [LY422014]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219227 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PRPS2 protein (Cat# [TP319227]). The protein was produced from HEK293T cells transfected with PRPS2 cDNA clone (Cat# RC219227) using MegaTran 2.0 (Cat# [TT210002]).