

Product datasheet for RC210719

PRPSAP2 (NM_002767) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRPSAP2 (NM_002767) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PRPSAP2
Synonyms:	PAP41
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210719 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGTTTTGTGTGACGCCACCTGAATTAGAAACCAAGATGAACATAACCAAAGGTGGTCTGGTGTGTTTT
CAGCAAATCGAATTCATCATGTATGGAGCTATCAAAGAAAATTCAGAGCGGCTAGGGGTGGAGATGGG
CAAAGTGCAGGTTTACCAGGAACCTAACAGAGAAACGAGAGTACAAATTCAGAGTCTGTGAGGGGAAAA
GATGTTTTTCATCATCAAATGTTTGAAGGACGTGAACACCACCATCATGGAGCTCCTGATCATGGTGT
ATGCATGTAAGACCTCTGTGCAAGAGCATCATTGGCGTGATACCCTACTTTCTTACAGCAAGCAGTG
CAAGATGAGAAAAAGAGGCTCCATTGTCTCTAAATTTGCTGGCTTCCATGATGTGCAAAGCTGGTCTAACT
CATCTTATTACTATGGATTTACACCAGAAGGAAATTCAGGGCTTCTTCAATATTCCTGTTGACAATTTAA
GAGCATCTCCCTTCTTATTACAGTATATTCAGAAGAGATCCCAGATTACAGGAATGCAGTAATCGTGGC
CAAGTCTCCAGCCTCGGCGAAGAGGGCACAGTCTTTTGTGAGCGCCTGCGCCTGGGAATTCAGTGTGATT
CATGGAGAGGGCAGGATGCCGAGTCGGACTTGGTGGATGGACGGCATTCCCCACCCATGGTCAGAAGTG
TGGCTGCCATCCACCCAGCCTGGAGATCCCCATGCTGATTCTTAAAGAAAAGCCCCCAATCACGGTTGT
GGGTGATGTTGGAGGAAGGATTGCCATCATCGTGGATGACATCATTGATGATGTTGACAGCTTTCTTGTCT
GCAGCAGAGACCCTGAAGGAAAGAGGTGCATATAAGATCTTTGTGATGGCAACTCATGGCTTGTGTTCTT
CTGACGCCCCCGCGGATTGAAGAGTCTGCCATTGATGAGGTGGTGGTACCAATAACAATTCACATGA
AGTCCAGAAGCTCCAGTGCCCCAAGATTAAGACTGTGGATATCAGCATGATCCTTTCAGAGGCGATCCGT
CGGATCCACAATGGGGAGTCCATGTCCTACCTTTTCAGAAACATAGGCTTAGATGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC210719 protein sequence
Red=Cloning site Green=Tags(s)

MFCVTPPELETKMNITKGGVLVFSANSNSSCMELSKKIAERLGVEMGKVQVYQEPNRETRVQIQESVRGK
 DVFIIQTVSKDVNTTIMELLIMVYACKTSCAKSIIGVIPYFPYSKQCKMRKRSIVSKLLASMMCKAGLT
 HLITMDLHQKEIQGFNIPVDNLRASPFLQYIQEEIPDYRNAVIVAKSPASAKRAQSFAERLRLGIAVI
 HGEAQDAESDLVDRHSPPMVRSVAIIHPSLEIPMLIPKEKPPITVVGDVGGRIAIIVDDIIDDVDSFLA
 AAETLKERGAYKIFVMATHGLLSSDAPRRIEESAIDEVVVNTNIPHEVQKLQCPKIKTVDISMILSEAIR
 RIHNGESMSYLFRNIGLDD

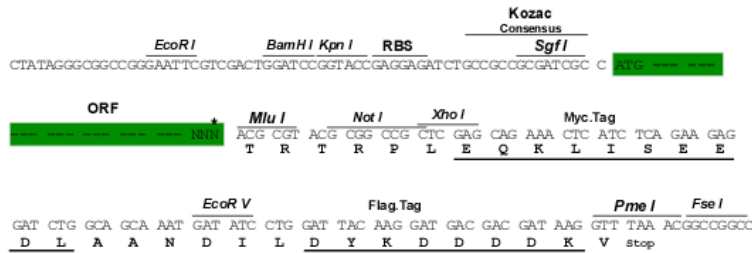
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6005_a12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_002767

ORF Size: 1107 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_002767.4](#)

RefSeq Size: 2021 bp

RefSeq ORF: 1110 bp

Locus ID: 5636

UniProt ID: [O60256](#)

Cytogenetics: 17p11.2

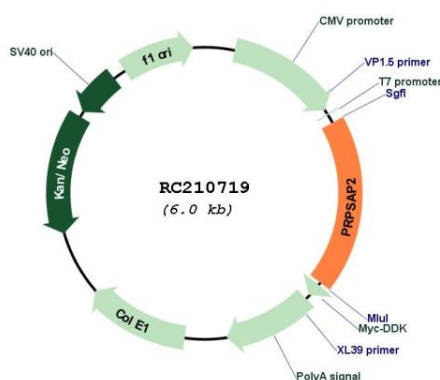
Domains: Pribosyltran

Protein Families: Druggable Genome

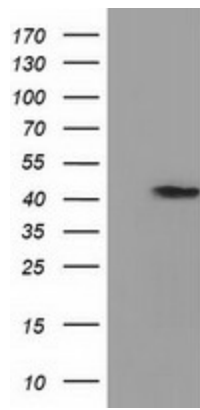
MW: 40.9 kDa

Gene Summary: This gene encodes a protein that associates with the enzyme phosphoribosylpyrophosphate synthetase (PRS). PRS catalyzes the formation of phosphoribosylpyrophosphate which is a substrate for synthesis of purine and pyrimidine nucleotides, histidine, tryptophan and NAD. PRS exists as a complex with two catalytic subunits and two associated subunits. This gene encodes a non-catalytic associated subunit of PRS. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Sep 2011]

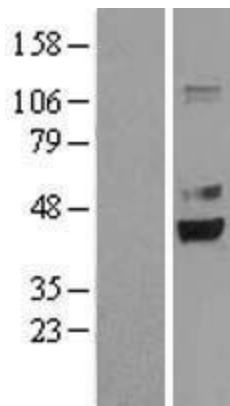
Product images:



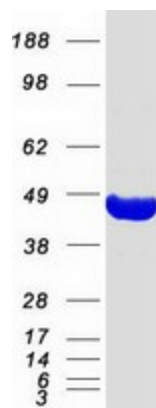
Circular map for RC210719



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PRPSAP2 (Cat# RC210719, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PRPSAP2(Cat# [TA501563]). Positive lysates [LY400988] (100ug) and [LC400988] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400988]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210719 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PRPSAP2 protein (Cat# [TP310719]). The protein was produced from HEK293T cells transfected with PRPSAP2 cDNA clone (Cat# RC210719) using MegaTran 2.0 (Cat# [TT210002]).