

Product datasheet for **RC217023**

PAPSS1 (NM_005443) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAPSS1 (NM_005443) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PAPSS1
Synonyms:	ATPSK1; PAPSS; SK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC217023 representing NM_005443
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGATCCCCGGGAGCCTGTGCAAGAAAGTCAAACCTGAGCAATAACCGCAGAACTGGGGAATGCAGA
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 TCCAAGGCTTGGACCGTGTGACAGAATACTACAAATCCTTGGAGAAAGCT

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Protein Sequence:

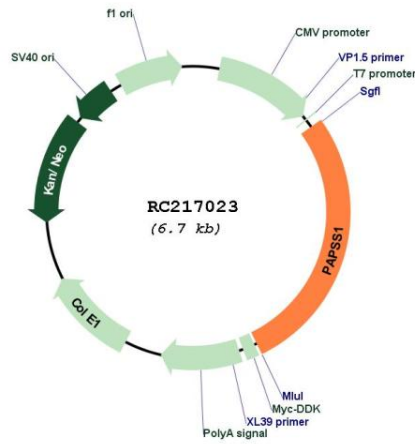
>RC217023 representing NM_005443
 Red=Cloning site Green=Tags(s)

MEIPGSLCKKVKLSNNAQNWGMQRATNVTYQAHVSRNKRQVVGTRGGFRGCTVWL TGLSGAGKTTVSM
 ALEEYL VCHGIPCYTL DGDNI RQGLNKNLGFSPEDREENVRRIAEVAKL FADAGLVCITSFISPYTQDRN
 NARQIHEGASLPFFFEVFDAPLHVCEQRDVKGL YKKARAGEIKGFTGIDSEYEKPEAPEL VLKTDSCDVN
 DCVQQVVELLQERDIPVDASYEVKEL YVPENKHLAKTDAETLPALKINKVDMQVWVQVLAEGWATPLNG
 FMREREYLQCLHFDCLLDGGVINL SVPIVL TATHEDKERLDGCTAFALMYEGRRVAILRNPEFFEHRKEE
 RCARQWGTTCKNHPYIKMVMEQGDWLIGGDLQVLD RYVWNDGLDQYRLTPTLTKQKFKDMNADAVFAFQL
 RNPVHNGHALLMQDTHKQLLERGYRRPVLLLHPLGGWTKDDDVPLMWRMKQHAAVLEEVLPETTVVAI
 FPSPPMYAGPTEVQWHCRARMVAGANFYIVGRDPAGMPHPETGKDL YEPSHGAKVLTMAPGLITLIEIVPF
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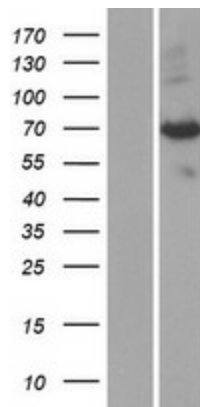
TRTRPLEQKLISEEDLAANDILDYKDDDDKVV

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_005443.5
RefSeq Size:	2558 bp
RefSeq ORF:	1875 bp
Locus ID:	9061
UniProt ID:	O43252
Cytogenetics:	4q25
Domains:	ATP-sulfurylase, APS_kinase
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Purine metabolism, Selenoamino acid metabolism, Sulfur metabolism
MW:	70.7 kDa
Gene Summary:	Three-prime-phosphoadenosine 5-prime-phosphosulfate (PAPS) is the sulfate donor cosubstrate for all sulfotransferase (SULT) enzymes (Xu et al., 2000 [PubMed 10679223]). SULTs catalyze the sulfate conjugation of many endogenous and exogenous compounds, including drugs and other xenobiotics. In humans, PAPS is synthesized from adenosine 5-prime triphosphate (ATP) and inorganic sulfate by 2 isoforms, PAPSS1 and PAPSS2 (MIM 603005).[supplied by OMIM, Mar 2008]

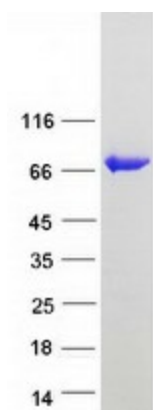
Product images:



Circular map for RC217023



Western blot validation of overexpression lysate (Cat# [LY417300]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217023 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PAPSS1 protein (Cat# [TP317023]). The protein was produced from HEK293T cells transfected with PAPSS1 cDNA clone (Cat# RC217023) using MegaTran 2.0 (Cat# [TT210002]).