

Product datasheet for **MR230687**

Papss2 (NM_001201470) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Papss2 (NM_001201470) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Papss2
Synonyms:	1810018P12Rik; AI159688; Atpsk2; AtpsU2; bm; Sk2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR230687 representing NM_001201470
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCGGGGTCAAGAAGCAGAAGACGGACCAGCAAAAATCCACCAATGTGGTCTACCAGGCCATCATG
 TGAGCAGGAACAAGAGAGACAAGTGGTTGGAACCAAGGGAGGATTCCGAGGATGTACCGTGGCTAAC
 AGGTCTCTCTGGTCTGGGAAAACAACCATAAGCTTTGCTTTGGAAGAGTACCTGTATCTCACGCCATC
 CCATGTTACTCTCTGGATGGGACAATGTCGTCATGGCCTTAATAAGAACCCTGGGATTCTCTCGGGGG
 ACCGAGAAGAGAATATCCGCCGGATCGCGGAGGTGCCAGGCTCTTTGCCGACGCCGGCCTGGTTTGCAT
 CACCAGCTTTATCTCCTTTTGCAAAGGATCGTGAGAATGCCCGAAAAATCCACGAATCAGCAGGACTC
 CCGTTCTTTGAGATCTTTGATAGTGCCTTTAAATATCTGTGAAAGCCGAGACGTAAGGACTCTACA
 AACGAGCCCGAGCAGGAGAGATTAAAGGGTTACAGGCATCGATTCTGACTATGAGAAACCTGAACTCC
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 ATCAAATCCGAGCTGAGGCAGAGACTCTCCCATCACTACCAATTACCAAGCTGGATCTGCAGTGGGTGCA
 GATTCTGAGTGAAGGCTGGGCCACTCCCCTCAAAGGCTTTATGCGGGAGAAGGAGTACTTGCAAACCTCA
 CACTTCGACACTCTACTGGACGATGGAGTCATCAACATGAGTATCCCATTTGATTGCCCGTTTCTGCGG
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 AAGCACCCCATATCAAATGGTGTGAAAGTGGGACTGGCTGTTGGTGGAGACCTACAGGTGCTAG
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 AAGGGTCTGGATCCCAAGTCAACTATTGTTGCCATCTTCCATCTCTATGTTATATGCTGGTCCACACA
 GAGGTCCAGTGGCATTGCAGATGCCGATGATTGCAGGAGCAATTTCTACATTGTTGGGTAGGGATCCCG
 CAGGAATGCCCATCCTGAGACAAAGAAAGACCTATATGAACCCACCCACGGGGCAAGGTCTTGAGTAT
 GGCCCTGGCCTTACCTCTGTGAAATAATTCCGTTCCGAGTGGTGCCTACAATAAAATAAAAAGGCC
 ATGGACTTTTATGATCCAGCAAGGCACGAGGATTTGACTTCATCTCAGGAACTCGCATGAGGAAGCTCG
 CCCGGGAAGGAGAAGATCCCCAGATGGCTTCATGGCCCCGAAAGCGTGGAAAGTGTGACAGATTACTA
 CAGGTCTCTGAGAAGACCAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR230687 representing NM_001201470
 Red=Cloning site Green=Tags(s)

MSGVKKKQTDQKSTNVVYQAHVSRNKRQVVGTRGGFRGCTVWLTGLSGAGKTTISFAL EEYL VSHAI
 PCYSLDGDNVRHGLNKNLGF SAGREENIRRIAEVARL FADAGLVCITSFISPF AKDRENARKIHESAGL
 PFFEIFVDAPLNICESRDVKGLYKRARAGEIKGFTGIDSDYEKPEPETECVLKTNLSSVSDCVQVVELLQ
 EQNIVPHTTIKGIHELFPENKVDQIRAEETLPSLPITKLDLQWVQILSEGWATPLKGFMRKEYLQTL
 HFDTLDDGVINMSIPIVLPVSADDKARLEGCSKFALMYEGRVALLQDPEFYEHRKEERCSRVTGATA
 KHPHIKVMESGDWL VGGDLQVLERIRWDDGLDQYRL TPELEKQCKDMNADAVFAFQLRNPVHNGHALL
 MQDTRRRLLERGYKHPVLLLHPLGGWTKDDDVPLEWRMKQHA AVL EERVLPKSTIVAI FSPML YAGPT
 EVQWHCRMIAGANFYIVGRDPAGMPHPETKDL YEPHGGKVL SMAPGLTSVEI IPFRVAAYNKIKKA
 MDFYDPARHEEFDFISGTRMRKLAREGEDPPDGFMAPKAWKVLTDYYRSLEKTN

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

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_001201470.1 , NP_001188399.1
RefSeq Size:	3599 bp
RefSeq ORF:	1845 bp
Locus ID:	23972
Cytogenetics:	19 27.46 cM
MW:	69.9 kDa
Gene Summary:	Bifunctional enzyme with both ATP sulfurylase and APS kinase activity, which mediates two steps in the sulfate activation pathway. The first step is the transfer of a sulfate group to ATP to yield adenosine 5'-phosphosulfate (APS), and the second step is the transfer of a phosphate group from ATP to APS yielding 3'-phosphoadenylylsulfate (PAPS: activated sulfate donor used by sulfotransferase). In mammals, PAPS is the sole source of sulfate; APS appears to be only an intermediate in the sulfate-activation pathway. May have an important role in skeletogenesis during postnatal growth.[UniProtKB/Swiss-Prot Function]