

Product datasheet for **MG225151**

Papss2 (NM_011864) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Papss2 (NM_011864) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Papss2
Synonyms:	1810018P12Rik; AI159688; Atpsk2; AtpsU2; bm; Sk2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG225151 representing NM_011864
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCTGCAAATTTCAAATGAACCATAAAAGAGACCAGCAAAAATCCACCAATGTGGTCTACCAGGCC
 ATCATGTGAGCAGGAACAAGAGAGGACAAGTGGTTGGAACCAGGGGAGGATCCGAGGATGTACCGTGTG
 GCTAACAGGTCTCTCTGGTGCTGGGAAAACAACCATAGCTTTGCTTTGGAAGAGTACCTTGTATCTCAC
 GCCATCCCATGTTACTCTCTGGATGGGGACAATGTCGTCATGGCCTTAATAAGAACCTGGGATTCTCTG
 CGGGGACCGAGAAGAGAATATCCGCCGATCGCGGAGGTGGCCAGGCTCTTTGCCGACGCCGCCCTGGT
 TTGCATCACCAGCTTTATCTCTCTTTTCAAAGGATCGTGAGAATGCCGAAAAATCCACGAATCAGCA
 GGACTCCCATTCTTTGAGATCTTTGTAGATGCGCCTTTAAATATCTGTGAAAGCCGAGACGTAAGGAC
 TCTACAAACGAGCCCGAGCAGGAGAGATTAAGGGTTTACAGGCATCGATTCTGACTATGAGAACTGA
 AACTCCAGAGTGTGTGCTGAAGACCAACCTGTCTTCAGTAAGCGACTGTGTGCAACAGGTGGTGAACCT
 TTGCAGGAGCAGAACATTGTACCCACACCACCATCAAAGGCATCCACGAACTCTTTGTGCCAGAAAACA
 AAGTCGATCAAATCCGAGCTGAGGCAGAGACTCTCCCATCACTACCAATTACCAAGCTGGATCTGCAGTG
 GGTGCAGATTCTGAGTGAAGGCTGGGCCACTCCCTCAAAGGCTTTATGCGGGAGAAGGAGTACTTGCAA
 ACTCTACACTTCGACACTCTACTGGACGGCGTGGTTCCCGTGATGGAGTCATCAACATGAGTATCCCA
 TTGTATTGCCCGTTTCTGCGGATGACAAGGCACGGCTCGAAGGGTGCAGCAAATTTGCCCTGATGTACGA
 AGGTCGGAGGGTGCCTCTATTACAGGACCCTGAATTCTATGAGCATAGGAAAGAGGAGCGCTGTTCTCGT
 GTGTGGGAAACAGCCACTGCAAAGCACCCTCATCAAATGGTGTGAAAGTGGGACTGGCTTGTG
 GTGGAGACCTACAGGTCTAGAGAGAATAAGGTGGGACGATGGGCTGGACCAATACCGCTTACCGCTCT
 GGAGCTCAAACAGAAGTGTAAAGACATGAATGCTGATGCCGTGTTGCATTCCAGTTGCGCAATCCTGTC
 CACAATGGTCATGCCCTCCTGATGCAGGACACCCGCCGAGGCTCCTGGAGAGGGTTACAGCACCCAG
 TCCTCCTGCTCCACCCTTTGGGGCTGGACCAAGGACGATGACGTACCTCTGGAATGGAGGATGAAACA
 GCATGCAGCTGTACTGGAGGAAAGGCTCCTGGATCCCAAGTCACTATTGTTGCCATCTTCCATCTCCT
 ATGTTATATGCTGGTCCACAGAGGTCCAGTGGCATTGCAGATGCCGGATGATTGCAGGAGCCAATTTCT
 ACATTGTGGGTAGGGATCCCGCAGGAATGCCCATCCTGAGACAAAGAAAGACCTATATGAACCCACCCA
 CGGGGCAAGGTCTTGTAGTATGGCCCTGGCTTACCTCTGTGGAATAATTCCGTTCCGAGTGGCTGCC
 TACAATAAAATAAAAAGCCATGGACTTTTATGATCCAGCAAGGCACGAGGAGTTTACTTTCATCTCAG
 GAACTCGCATGAGGAAGCTCGCCCGGAAGGAGAAGATCCCCAGATGGCTTCATGGCCCGAAAGCGTG
 GAAAGTGTGACAGATTACTACAGGTCTCTGGAGAAGACCAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG225151 representing NM_011864
 Red=Cloning site Green=Tags(s)

MSANFKMNHKRDQKSTNVVYQAHVSRNKRQVVVTRGGFRGCTVWLTGLSGAGKTTISFAL EEYL VSH
 AIPCYSLDGDNVRHGLNKNLGF SAGDREENIRRIAEVARLFADAGLVCITSFISPF AKDRENARKIHESA
 GLPFFEIFVDAPLNICESRDVKGLYKRARAGEIKGFTGIDSDYEKPETPECVLKTNLSSVSDCVQVVEL
 LQEQNIVPHTTIKGIHELFPENKVDQIRAEETLPSLPITKLDLQWVQILSEGWATPLKGMREKEYLQ
 TLHFDTLLDGVVPRDGVINMSIPIVLPVSADDKARLEGCSKFALMYEGRRVALLQDPEFYEHRKEERCSR
 VWGTATAKHPHIKVMESGDWL VGGDLQVLERIRWDDGLDQYRLTPELEKQCKMDMNADAVFAFQLRNPV
 HNGHALLMQDTRRRLLERGYKHPVLLLHPLGGWTKDDDVPLEWRMKQHAAVLEERVLDPKSTIVAI FSPS
 MLYAGPTEVQWHCRMIAGANFYIVGRDPAGMPHPETKDL YEP THGGKVL SMAPGLTSVEIIPFRVAA
 YNKIKKAMDFYD PARHEEFDFISGTRMRKLAREGEDPPDGFMAPKAWKVL TDYYSLEKTN

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

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_011864.2
RefSeq Size:	3635 bp
RefSeq ORF:	1866 bp
Locus ID:	23972
UniProt ID:	O88428
Cytogenetics:	19 27.46 cM
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]