

## Product datasheet for **RG222506**

### **PAPSS2 (NM\_001015880) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PAPSS2 (NM_001015880) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PAPSS2
Synonyms:	ATPSK2; BCYM4; SK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG222506 representing NM\_001015880  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCGGGGATCAAGAAGCAAAGACGGAGAACCAGCAGAAATCCACCAATGTAGTCTATCAGGCCACC  
 ATGTGAGCAGGAATAAGAGAGGGCAAGTGGTTGGAACAAGGGTGGGTTCCGAGGATGTACCGTGTGGCT  
 AACAGGTCTCTCTGGTGTGAAAAACAACGATAAGTTTTGCCCTGGAGGAGTACCTTGTCTCCCATGCC  
 ATCCCTTGTACTCCCTGGATGGGACAATGTCCGTATGGCCTAACAGAAATCTCGATTCTCTCCTG  
 GGGACAGAGAGAAAATATCCGCCGATTGCTGAGGTGGCTAAGCTGTTGCTGATGCTGGTCTGGTCTG  
 CATTACCAGCTTTATTTCTCATTTCGAAAGGATCGTGAAGTACCCGAAAATACATGAATCAGCAGGG  
 CTGCCATTTTAAATATTTGTAGATGCACCTCTAAATATTTGTAAAGCAGAGACGTAAGGCTCTCT  
 ATAAAAGGGCCAGAGCTGGGAGATTAAGGATTTACAGTATTGATTCTGATTATGAGAAACCTGAAAC  
 TCCTGAGCGTGTCTTAAACCAATTTGCCACAGTGAAGTGTGTCACCAGGTAGTGAACCTCTG  
 CAAGAGCAGAACATTGTACCCTATACTATAATCAAAGATATCCACGAACTCTTTGTGCCGAAAACAAC  
 TTGACCACGTCCGAGCTGAGGCTGAAACTCTCCCTTCATTATCAATTACTAAGCTGGATCTCCAGTGGGT  
 CCAGGTTTTGAGCGAAGGCTGGGCCACTCCCTCAAAGTTTTGATGCGGGAGAAGGAGTACTTACAGGTT  
 ATGCACCTTGACACCCTGCTAGATGGCATGGCCCTTCTGATGGCGTGATCAACATGAGCATCCCCATTG  
 TACTGCCCGTCTCTGCAGAGGATAAGACACGGCTGGAAGGGTGCAGCAAGTTTGTCTGGCACATGGTGG  
 ACGGAGGTAGCTATCTACGAGACGCTGAATTTCTATGAACACAGAAAAGAGGAACGCTGTTCCCGTGT  
 TGGGGACAACATGTACAAAACACCCCATATCAAATGGTATGGAAGTGGGACTGGCTGGTGGTGGTGG  
 GAGACTTTCAGTGTGGAGAAAATAAGATGGAATGATGGGTGGACCAATACCGTCTGACACCTCTGGA  
 GCTCAAACAGAAAATGTAAGAAAATGAATGCTGATGCGGTTTGCATTCCAGTTGCGCAATCCTGTCCAC  
 AATGGCCATGCCCTGTTGATGCAGGACACTCGCCGAGGCTCCTAGAGAGGGGCTACAAGCACCCGGTCC  
 TCTACTACACCCTCTGGGCGGCTGGACCAAGGATGACGATGTGCCTCTAGACTGGCGGATGAAGCAGCA  
 CGCGGCTGTGCTCGAGGAAGGGTCTGGATCCCAAGTCAACCATTGTTGCCATCTTCCGCTCTCCCATG  
 TTATATGCTGGCCACAGAGGTCCAGTGGCACTGCAGTCCCGGATGATTGCGGGTCCCAATTTCTACA  
 TTGTGGGAGGGACCCTGCAGGAATGCCCATCCTGAAACCAAGAAGGATCTGTATGAACCCACTCATGG  
 GGGCAAGGTCTTGAGCATGGCCCTGCCTCACCTCTGTGAAATCATTCCATCCGAGTGGCTGCCTAC  
 AACAAAGCCAAAAAGCCATGGACTTCTATGATCCAGCAAGGCACAATGAGTTTGACTTCTCAGGAA  
 CTGAATGAGGAAGCTCGCCCGGAAGGAGAGAATCCCCAGATGGCTTCATGGCCCCAAAGCATGGAA  
 GGTCTGACAGATTATTACAGGTCCCTGGAGAAGAAC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG222506 representing NM\_001015880  
 Red=Cloning site Green=Tags(s)

MSGIKKQKTENQQKSTNVVYQAHVSRNKRQVVGTRGGFRGCTVWL TGLSGAGKTTISFALEEYLVSHA  
 IPCYSLDGDNRHGLNRNLGFS PGDREENIRRIAEVAKLFADAGLVCITSFISPF AKDRENARKIHESAG  
 LPFFEIFVDAPLNICESRDVKGLYKRARAGEIKGFTGIDS DYKPEKTPERVLKTNLSTVSDCVHQVVELL  
 QEQNIVPYTIIKDIHELFPENKLDHVRAEAETLPSLSITKLDLQWVQV LSEGWATPLKGFMRKEYLQV  
 MHFDTL LDGMALPDGVINMSIPIVLPVSAEDKTRLEGSKFVLAHGRRVAILRDAEFYEHKKEERCSR  
 VGGTCTKHPHIKVMESGDWLVGGDLQVLEKIRWNDGLDQYRLTPLELKQKCKEMNADAVFAFQLRNPVH  
 NGHALLMQDTRRRLLERGYKHPVLLHPLGGWTKDDVPLDWRMKQHAAVLEEGVLDPKSTIVAIFFSPM  
 LYAGPTEVQWHCRSRMIAGANFYIVGRDPAGMPHPETKKDLYEPTHGGKVL SMAPGLTSVEIIPFRVAA  
 YNKAKKAMDFYDPARHNEFD FISGTRMRKLAREGENPPDGFMAPKAWKVL TDYYSLEKN

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

SgfI-MluI



<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001015880.2</a>
<b>RefSeq Size:</b>	3874 bp
<b>RefSeq ORF:</b>	1860 bp
<b>Locus ID:</b>	9060
<b>UniProt ID:</b>	<a href="#">O95340</a>
<b>Cytogenetics:</b>	10q23.2-q23.31
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Metabolic pathways, Purine metabolism, Selenoamino acid metabolism, Sulfur metabolism
<b>Gene Summary:</b>	Sulfation is a common modification of endogenous (lipids, proteins, and carbohydrates) and exogenous (xenobiotics and drugs) compounds. In mammals, the sulfate source is 3'-phosphoadenosine 5'-phosphosulfate (PAPS), created from ATP and inorganic sulfate. Two different tissue isoforms encoded by different genes synthesize PAPS. This gene encodes one of the two PAPS synthetases. Defects in this gene cause the Pakistani type of spondyloepimetaphyseal dysplasia. Two alternatively spliced transcript variants that encode different isoforms have been described for this gene. [provided by RefSeq, Jul 2008]