

## Product datasheet for **MR230650**

### Papss1 (NM\_001289478) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Papss1 (NM_001289478) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Papss1
Synonyms:	A1325286; Asapk; SK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR230650 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCAGAGAGCAACCAACGTACCTATCAAGCCCACCATGTCAGCAGGAATAAGAGAGGGCAGGTGGTGG  
 GGACCAGAGGTGGCTTCCGTGGTTGCACAGTTTGGCTGACAGGATTGTCCGGAGCAGGGAAGACGACCGT  
 GAGCATGGCTCTGGAGGAGTACCTGGTGTGCCACGGCATTCCGTGCTACACTTTGGATGGTGACAACATC  
 CGCCAAGGACTCAATAAGAACCTCGGCTTCAGTCTGAGGACAGAGAAGAGAACGTTCCGCCATAGCTG  
 AGGTGGCGAAGCTGTTTGCAGATGCTGGCTTAGTGTATCACCAGCTTTATATCGCCTTACACACAGGA  
 TCGCAACAACGCAAGGCAGATTCATGAGGGTGAAGCTTGCCCTCTTTGAAGTTTTTGTGATGCTCCT  
 CTGCATGTCTGTGAGCAGAGGGATGTCAAAGCCCTCTACAAGAAGGCGCGGCAGGGGAGATAAAAGGCT  
 TCACTGGCATCGATTCTGAGTATGAGAAACCCGAGGCCCGGAGCTGGTGTGAAAACGGATTCTGTGA  
 CGTCAACGACTGGTCCAGCAGGTTGTGGAGCTTCTTCAGGAACGGGACATCGTCCCTGTGGATGCTTCC  
 TATGAAGTGAAAGAGCTATATGTCCAGAGAATAAACTTCACTTGGCCAAAACCTGATGCAGAAGCCTTAC  
 CAGCCCTGAAAATCAATAAAGTGGATATGCAGTGGGTGCAGGTTTTGGCAGAAGTTGGGCGACTCCTCT  
 GAACGGCTTATGAGAGAGAGGGAGTACTTGCAGTGCCTCCATTTGATTGTCTTCTGGATGGAGGCGTC  
 ATCAACTTATCGGTGCCTATAGTTCTGACAGCTACGCACGAGGATAAGGAGAGGCTGGACGGCTGCACCG  
 CGTTTCGCTCTGGTGTATGAGGGCCGCGCGTGGCCATCCTTCGGAATCCTGAATTTTTGAGCACCGGAA  
 AGAGGAGCGGTGTGCCAGACAGTGGGGAACAACATGCAAGAACCACCCCTACATCAAGATGGTCTTGAA  
 CAAGGGGATTGGCTGATTGGAGGAGATCTCAAGTCTGGACCGGATTTACTGGAATGATGGTCTTGATC  
 AGTAGCCCTTACCCCGACGGAGCTCAAGCAGAAGTTTAAAGATATGAACGCTGATGCTCTTTGCATT  
 TCAGTTGCGCAACCCAGTGCACAACGGGACGCTCTGTTAATGCAGGATACCCACAAGCAGCTTCTGGAG  
 AGGGGCTACCGGCGCCCTGTCCTGCTCCTCATCTCTTGGTGGCTGGACGAAGGATGACGATGTCCCTC  
 TGATGTGGCGTATGAAGCAGCACGCTGCAGTGTGGAGGAGGCATCCTGGATCCTGAAACGACAGTGGT  
 GGCCATTTTCCCGTCTCCTATGATGATGCTGGGCCAACCGAGGTCCAGTGGCACTGCAGGGCGCGGATG  
 GTGGCCGAGCCAATTTTATATTGTTGGACGAGACCCTGCTGGCATGCCTATCCGGAGACAGGGAAGG  
 ACCTCTATGAGCCAACACATGGTGCCAAAGTGTGACGATGGCCCCAGGCCTGATTACCTTGAAATCGT  
 TCCCTCCGAGTGCAGCTTACAACAAGAAAAAGAAGCGGATGGACTACTATGACTCTGAGCACCACGAA  
 GACTTCGAGTTTATTTTCAGGAACGAGGATGCGCAAGCTGGCACGGAAGGCCAGAAACCTCCAGAGGGCT  
 TCATGGCCCCCAAGGCCTGGACTGTGCTGGTAGAGTACTACAAGTCTTAGAGAAAAGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR230650 protein sequence  
 Red=Cloning site Green=Tags(s)

MQRATNVTYQAHVSRNKRQVVGTRGGFRGCTVWL TGLSGAGKTTVSMAL E EYL VCHGIPCYTLDGDNI  
 RQGLNKNLGFSPEDREENVRRIAEVAKLFADAGLVCITSFISPYTQDRNNARQIHEGASLPFFEFVVDAP  
 LHVCEQRDVKGLYKKARAGEIKGFTGIDSEYEKPEAPELVLKTDCDVNDVQVVELLQERDIVPDAS  
 YEVKELYVPENKLLAKTDAEALPALKINKVDMQWVQVLAEGWATPLNGFMREREYLQCLHFDCLLDGGV  
 INLSVPIVLTATHEDKERLDGCTAFALVYEGRRVAILRNPEFFEHRKEERCARQWGTCKNHPIKMLE  
 QGDWLIIGDLQVLDRIYWNDGLDQYRLTPTLQKQFKDMNADAVFAFQLRNPVHNGHALLMQDTHKQLLE  
 RGYRRPVLLHPLGGWTKDDVPLMWRMKQHAAVLEEGILDPEVVVAIFPSPMMYAGPTEVQWHCRARM  
 VAGANFYIVGRDPAGMPHPETGKDLYEPHGAKVLTMAPGLITLIVPFRVAAYNKKKKRMDYYDSEHHE  
 DFEFISGTRMRKLAREGQKPEGFMAPKAWTVLVEYKLSLEKA

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_001289478

ORF Size: 1812 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\\_001289478.1](#), [NP\\_001276407.1](#)

RefSeq Size: 2794 bp

RefSeq ORF: 1812 bp

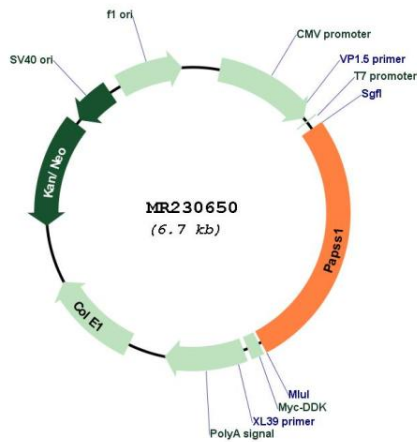
Locus ID: 23971

Cytogenetics: 3 61.05 cM

**MW:** 68.5 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 (PubMed:7493984). Required for normal biosynthesis of sulfated L-selectin ligands in endothelial cells (By similarity). [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR230650