

## Product datasheet for RN209287

### Sephs2 (NM\_001079889) Rat Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Sephs2 (NM\_001079889) Rat Untagged Clone  
**Symbol:** Sephs2  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >RN209287 representing NM\_001079889  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGAAGCGGCGCAGGCGCCAGCGGAGAAGCCATGGCGGCACTAGTGGCCGCGGAAGTTCTTTGG  
 GCCCGCGGGCTGGTCTGCTGGCCGAGTTTCTCAACTACCGGCGGTTTCGAGCCCCAGACTGGGCTT  
 CAGCCCGAGCTGGCGGCTGACGAGCTTCTCCGGCATGAAAGGCTGAGGCTGCAAGTCCCCAGGAGACC  
 CTGCTCAAACCTCTGGAGGGACTGACGCGGCCCGCTGCAGCCCCGCTTACCTCGGGTCTGGTCGGGG  
 GCCAGGAAGAGACGGTGCAGGAAGGGGGCTGACCACCAGGCCCGGCCGGGCTCAGCCTCCCCCTCGCT  
 GAGCATTGGGATGGACTCCTGCGTCATCCCCCTGAGGCACGGAGGCTGTGCTGGTGCAGACCACCGAC  
 TTCTTTTACCCCTTGGTGAAGATCCCTATATGATGGGGCGCATAGCTTGTGCCAATGTGCTCAGTGACC  
 TCTATGCCATGGGCATTACCGAGTGTGACAACATGTTGATGTTACTCAGTGTGAGCCAGAGCATGAGTGA  
 AAAGGAACGAGAGAAGGTAACGCCGCTCATGATCAAAGGCTTTCGTGACGCTGCGGAAGAGGGAGGA  
 GCAGTACTGGTGGACAGACAGTGGTCAACCCTTGGATTATCATCGGTGGGGTTGCCACTGTGGTGTGC  
 AGCAAAATGAATTCATAATGCCAGCGCTGTGGTAGGAGATGTGCTGGTATTAACCAAGCCTTTAGG  
 AACCCAGGTTGCTGCAATGCCACCAATGGCTGGATAATCCTGAGAAATGGAATAAAATCAAGATGGTG  
 GTTCCAGAGAGGAAGTAGAGCTAGCCTATCAGGAAGCTATGTTCAACATGGCTACTCTGAACAGGACTG  
 CTGCTAGCTTGATGCACACTTTTAAATGCTCACGACCCACGGATATCACAGGCTTTGGCATATTAGGACA  
 CTCCCAGAACCTCGAAAAACAGCAAAAAATGAAGTGTCTTTGTCAATCACAATCTGCCAATCATTGCC  
 AAGATGGCTGCGATCAGCAAAGCCAGTGGGCGCTTTGGCTCCTCAAGGAACATCAGCTGAAACCTCTG  
 GGGGATTACTGATCTGTCTGCCAAGAGAACAGGCGCCCGCTTTTGTTCGAAATCAAATCTTCAAAGTA  
 CGGAGAGGGTACCAAGCTTGGATTGTTGGCATCGTGGAGAAGGGAAACCGGACAGCCCGGATCATTGAC  
 AAGCCTCGGTTATTGAAGTTCTACCTCGGGAGCCTCTGCTTCTGCTGTGCTCTCTGACAATTCCA  
 ATGCAGCCTCTGAGCCTAGTTCT**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI



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<b>ACCN:</b>	NM_001079889
<b>Insert Size:</b>	1356 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP). The expression of this clone is not guaranteed due to the nature of selenoproteins.
<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>	<u><a href="#">NM_001079889.2</a></u> , <u><a href="#">NP_001073358.2</a></u>
<b>RefSeq Size:</b>	2342 bp
<b>RefSeq ORF:</b>	1356 bp
<b>Locus ID:</b>	308993
<b>Cytogenetics:</b>	1q37
<b>Gene Summary:</b>	This gene encodes an enzyme that catalyzes the production of monoselenophosphate (MSP) from selenide and ATP. MSP is the selenium donor required for synthesis of selenocysteine (Sec), which is co-translationally incorporated into selenoproteins at in-frame UGA codons that normally signal translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, the Sec insertion sequence (SECIS) element, which is necessary for the recognition of UGA as a Sec codon rather than as a stop signal. This protein is itself a selenoprotein containing a Sec residue at its active site, suggesting the existence of an autoregulatory mechanism. It is preferentially expressed in tissues implicated in the synthesis of selenoproteins and in sites of blood cell development. [provided by RefSeq, May 2017]