

## Product datasheet for **RN216536**

### Selenop (NM\_001083911) Rat Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Selenop (NM\_001083911) Rat Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Selenop  
**Synonyms:** Sepp1  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >RN216536 representing NM\_001083911  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGTGGAGAAGCCTAGGGCTTGCCTGGCTCTCTGTCTCCTCCCCTATGGAGGAGCAGAGAGCCAAGGCC  
AAAGCCCTGCTTGAAGCAAGCTCCACCCTGGAACATAGGAGATCAAAATCCAATGCTAACTCCGAGGG  
CACAGTGACAGTGGTTGCTCTTCAAGCCAGCTGATACCTGTGCCTTCTGCAGGCATCCAGATTGGAA  
GACCTGCGAATAAACTAGAGAACCAAGGATATTTAACATCTCCTATATTGTTGTTAATCATCAAGGAT  
CTCCTTCCCAATTAACATGCACATCTTAAAAAGCAGGTGTCAGATCACATTGCTGTTTACAGACAAGA  
TGAACATCAAACAGATGTCTGGACACTCTTAAATGGAAACAAAGATGACTTCTCATATATGACAGATGT  
GGCCGTCTTGTGTATCACCTTGGTTTGCCTACTCCTTCTCACTTTCCCGTATGTTGAAGAAGCCATCA  
AGATCGCTTACTGTGAGAAGAGGTGTGGAACTGCTCTTTCACGAGTCTTGAAGATGAAGCCTTCTGTAA  
AAACGTGTCCTCGGCTACTGCAAGTAAACCACAGAGCCCTCAGAGGAGCATAACCACCACAAGCACCAT  
GACAAACATGGGCATGAGCATCTTGGGAGCAGTAAGCCTCAGAGAATCAGCAACCAGGGCATTAGATG  
TTGAGACAAGTCTTCTCCTTCAAGCTTGCACCACCACCACCATAAGCACAAGGGCCAGCACAG  
GCAGGGTCACTTAGAGAGCTGAGACATGGGGGCAAGTGAAGGCTTCACTTCCAGAGGGAAG  
CTCTGACGAAGGGGATGCATAAACCCAGCTCCTGTGTAAGTTATCTGAGGAGTCTGGGGCAGCTACCAGTA  
GCTGCTGCTGCCACTGCCGACACCTCATATTTGAGAAAGTCAGGATCTGCAATCACTTGACAGTGTCCGA  
AAACCTCCCATCCTTGTGTAGCTGACAGGGGCTTTTCGCGGAGGAGAAAGTCATTGAATCCTGTCAATGT  
AGATCACCTCCAGCTGCCTGACACAGTCAGCATGTAAGCCCCACAGAAGCCAGCCCCAACCTGAAGCTGAA  
ATAATAAGACCAAGAAGTAAAAATGAAATTTGAAC**TAA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI



[View online >](#)

<b>ACCN:</b>	NM_001083911
<b>Insert Size:</b>	1158 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).
<b>OTI Annotation:</b>	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
<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_001083911.1</a></u> , <u><a href="#">NP_001077380.1</a></u>
<b>RefSeq Size:</b>	2115 bp
<b>RefSeq ORF:</b>	1158 bp
<b>Locus ID:</b>	29360
<b>UniProt ID:</b>	<u><a href="#">P25236</a></u>
<b>Cytogenetics:</b>	2q16
<b>Gene Summary:</b>	<p>This gene encodes a selenoprotein that is predominantly expressed in the liver and secreted into the plasma. This selenoprotein is unique in that it contains multiple selenocysteine (Sec) residues per polypeptide (10 in rat), and accounts for most of the selenium in plasma. It has been implicated as an extracellular antioxidant, and in the transport of selenium to extra-hepatic tissues via apolipoprotein E receptor-2 (apoER2). Mice lacking this gene exhibit neurological dysfunction, suggesting its importance in normal brain function. Sec is encoded by the UGA codon, which normally signals translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, designated the Sec insertion sequence (SECIS) element, that is necessary for the recognition of UGA as a Sec codon, rather than as a stop signal. The mRNA for this selenoprotein contains two SECIS elements. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Feb 2017]</p> <p>Transcript Variant: This variant (2, also known as Sepp1b) uses an alternate 5' non-coding exon, hence has a different 5' UTR compared to variant 1. Variants 1 and 2 encode the same protein containing 10 selenocysteine residues.</p>