

## Product datasheet for **RR216536**

### Selenop (NM\_001083911) Rat Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Selenop (NM\_001083911) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Selenop  
**Synonyms:** Sepp1  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RR216536 representing NM\_001083911  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGTGGAGAAGCCTAGGGCTTGCCTGGCTCTCTGTCTCCTCCCCTATGGAGGAGCAGAGAGCCAAGGCC  
AAAGCCCTGCTTGAAGCAAGCTCCACCCTGGAACATAGGAGATCAAAATCCAATGCTAACTCCGAGGG  
CACAGTGACAGTGGTTGCTCTTCAAGCCAGCTGATACCTGTGCCTTCTGCAGGCATCCAGATTGGAA  
GACCTGCGAATAAACTAGAGAACCAAGGATATTTAACATCTCCTATATTGTTGTTAATCATCAAGGAT  
CTCCTTCCCAATTAACATGCACATCTTAAAAAGCAGGTGTCAGATCACATTGCTGTTTACAGACAAGA  
TGAACATCAAACAGATGTCTGGACACTCTTAAATGGAAACAAAGATGACTTCTCATATATGACAGATGT  
GGCCGTCTTGTGTATCACCTTGGTTTGCCTACTCCTTCTCACTTTCCCGTATGTTGAAGAAGCCATCA  
AGATCGCTTACTGTGAGAAGAGGTGTGGAACTGCTCTTTCACGAGTCTTGAAGATGAAGCCTTCTGTAA  
AAACGTGTCCTCGGCTACTGCAAGTAAACCACAGAGCCCTCAGAGGAGCATAACCACCACAAGCACCAT  
GACAAACATGGGCATGAGCATCTTGGGAGCAGTAAGCCTCAGAGAATCAGCAACCAGGGCATTAGATG  
TTGAGACAAGTCTTCTCCTTCCAGGCTTGCAACCACCACCACCACCATAAGCACAAGGGCCAGCACAG  
GCAGGGTCACTTAGAGAGCTGAGACATGGGGCAAGTGAAGGCTTGAACCTTCACTTGCCAGAGGAAG  
CTCTGACGAAGGGGATGCATAAACCCAGCTCCTGTGTAAGTTATCTGAGGAGTCTGGGGCAGCTACCAGTA  
GCTGCTGCTGCCACTGCCGACACCTCATATTTGAGAAAGTCAGGATCTGCAATCACTTGACAGTGTCCGA  
AAACCTCCCATCCTTGTGTAGCTGACAGGGGCTTTTCGCGGAGGAGAAAGTCATTGAATCCTGTCAATGT  
AGATCACCTCCAGCTGCCTGACACAGTCAGCATGTAAGCCCCACAGAAGCCAGCCCCAACCTGAAGCTGAA  
ATAATAAGACCAAGAAGTAAAAATGAAATTTGAAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RR216536 representing NM\_001083911  
 Red=Cloning site Green=Tags(s)

MWRSLLGLALALCLLPYGGAESQGGSPACKQAPPWNIGDQNPMLNSEGTVTVVALLQAS\*YLCLLQASRLE  
 DLRIKLENQGYFNI SYIVVNHQGSPLKHAHLKKQVSDHIAVYRQDEHQTDVWTLNNGNKDDFLIYDRC  
 GRLVYHLGLPYSFLTFPYVEEAIKIAYPEKRCGNCSFTSLEDEAFCKNVSSATASKTTEPSEEHNHKKHH  
 DKHGHEHLGSSKPSNQPGALDVETSLPSPGLHHHHHHKHKGQHRQGHLES\*DMGASEGLQLSLAQRK  
 L\*RRGCINQLLCKLSEESGAATSSCCCHRHILFEKSGSAIT\*QCAENLPSLCS\*QGLFAEEKVIESQCQ  
 RSPAA\*HSQHVSPTEASPN\*S\*NNKTKK\*K\*NLN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

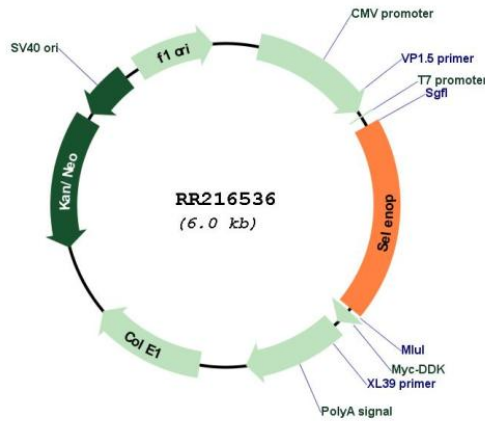
**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001083911

<b>ORF Size:</b>	1155 bp
<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_001083911.1</a> , <a href="#">NP_001077380.1</a>
<b>RefSeq Size:</b>	2115 bp
<b>RefSeq ORF:</b>	1158 bp
<b>Locus ID:</b>	29360
<b>UniProt ID:</b>	<a href="#">P25236</a>
<b>Cytogenetics:</b>	2q16
<b>MW:</b>	42.8 kDa
<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>