

## Product datasheet for **MC210875**

### Selenot (NM\_001040396) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Selenot (NM\_001040396) Mouse Untagged Clone  
**Symbol:** Selenot  
**Synonyms:** 2810407C02Rik; 5730408P04Rik; Se; Selt  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC210875 representing NM\_001040396  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGAGGCTCTGCTGCTTCTGCTGGTGGCGGCTCGGCGGTGGTCCGACGAGGCCTCGCCAACCTGG  
GCGGCTGCCAGCAAGAGATTAAGATGCAGTACGCCACCGGGCGCTGCTCAAGTTCAGATTTGTGT  
ATCCTGAGGGTACCGCGGGTGTGGAGGAGTACATCGGGTTATCAGCCAGCGGTATCCAGACATCCGC  
ATTGAAGGCGAGAATTATCTCCCTCAACCAATTTATAGACACATAGCATCTTTCCTGTCAGTCTCAAAC  
TAGTATTAATAGGCTTAATAATTGTTGGCAAAGATCCTTTTCTTTTTCGGCATGCAAGCTCCTAGCAT  
CTGGCAGTGGGCAAGAAAATAAGTTTATGCATGTATGATGGTTTTCTTCTGAGCAACATGATTGAG  
AACCAAGTGTATGTCAACAGGTGCATTTGAGATAACTTTAAATGATGTGCCAGTGTGGTCTAAGCTGGAAT  
CTGGACATCTCCATCCATGCAACAACCTGTTCAAATCTTGACAATGAAATGAAACTCAATGTGCATAT  
GGATTCAATCCACATCATCGATCA**TAG**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001040396  
**OTI Disclaimer:**

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.



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<b>OTI Annotation:</b>	This clone encodes a selenoprotein containing the rare amino acid selenocysteine (Sec). Sec is encoded by UGA codon, which normally signals translational termination. 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_001040396.2</a></u> , <u><a href="#">NP_001035486.2</a></u>
<b>RefSeq Size:</b>	3575 bp
<b>RefSeq ORF:</b>	588 bp
<b>Locus ID:</b>	69227
<b>UniProt ID:</b>	<u><a href="#">P62342</a></u>
<b>Cytogenetics:</b>	3 D
<b>Gene Summary:</b>	This gene encodes a selenoprotein, containing a selenocysteine (Sec) residue at the active site. Sec is encoded by the UGA codon that normally signals translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, the Sec insertion sequence (SECIS) element, that is necessary for the recognition of UGA as a Sec codon rather than as a stop signal. This protein is localized in the endoplasmic reticulum. It belongs to the SelWTH family that possesses a thioredoxin-like fold and a conserved CxxU (C is cysteine, U is Sec) motif found in several redox active proteins. Studies in mice indicate a crucial role for this gene in the protection of dopaminergic neurons against oxidative stress in Parkinson's disease, and in the control of glucose homeostasis in pancreatic beta-cells. A pseudogene of this locus has been identified on chromosome 8. [provided by RefSeq, Aug 2017]