

Product datasheet for **RN215083**

Selenot (NM_001014253) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Selenot (NM_001014253) Rat Untagged Clone
Symbol: Selenot
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN215083 representing NM_001014253
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGAGGCTCTTGCTGCTTCTGCTGGTGGCGGCGTGGCGGTGGTCCGAGCGAGGCCTCTGCCAACCTGG
GCGGCGTCCCAGCAAGAGATTAAGATGCAGTACGCCACGGGGCGCTGCTCAAGTTTCAGATTTGTGT
ATCCTGAGGGTACAGCGGGTGTGGAGGAGTACATGCGGGTTATTAGCCAGCGGTATCCAGACATCCGC
ATTGAGGGGAGAATTATCTCCCTCAACCAATTTATAGACACATAGCATCTTTCCTGTCAGTCTTCAAA
TAGTATTAATAGGCTTAATAATTGTTGGCAAAGATCCTTTTCTTTTTCGGCATGCAAGCTCCTAGCAT
CTGGCAGTGGGGCCAAGAAAATAAGGTTTATGCATGTATGATGGTCTTCTTCTTGAGCAACATGATTGAG
AACCAGTGTATGTCAACAGGTGCATTTGAGATAACTTTAAATGATGTACCGGTATGGTCTAAGCTGGAAT
CTGGACATCTCCATCCATGCAACAACCTGTTCAAATCTTGACAATGAAATGAACTCAATGTGCATAT
GGATTCATCCCACATCATCGATC**ATAG**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001014253

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.

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).



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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_001014253.2](#), [NP_001014275.2](#)

RefSeq Size: 1791 bp

RefSeq ORF: 588 bp

Locus ID: 365802

UniProt ID: [Q1H5H1](#)

Cytogenetics: 2q26

Gene Summary: 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 rat indicate a role for this gene in the regulation of calcium homeostasis and smooth muscle contraction. High induction of this gene is also associated with ontogenetic and regenerative processes in nervous, endocrine, and metabolic tissues. A pseudogene of this locus has been identified on chromosome 4. [provided by RefSeq, Aug 2017]