

Product datasheet for **RN213906**

Selenof (NM_133297) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Selenof (NM_133297) Rat Untagged Clone
Symbol: Selenof
Synonyms: Sep15
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN213906 representing NM_133297
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGCAGGGCAGGGCGGGTGGCTCCGGCCCGCTGGGGCTTCGCTTACTGCTGGCGACTGCGTTTC
AAGCGGTGTCTGCTCTTGGGGCAGAGTTCTCGTCAGAGGCATGCCGGGAGTTGGGCTTCTCCAGCAACTT
GCTCTGCAGCTCCTGCGATCTCCTTGGACAGTTAACCTGCTTCCACTGGATCCTGTCTGCAGAGGCTGC
TGTGAGGAAGAAGCGCAGTTTGAACCAAAAAGCTGTATGCAGGAGCCATCCTTGAAGTCTGTGGATGAA
AATTGGGGAGGTTCCCTCAAGTCCAAGCTTTTGTGAGAAGCGATAAACCCAAACTGTTTCAGAGGTCTACA
GATCAAGTATGTTTCGAGGCTCAGACCCTGTACTAAAGCTTTTGGACGACAACGGGAACATTGCTGAAGAG
CTCAGCATCCTCAAGTGGAACACAGACAGTGTGGAAGAGTTCTGAGCGAGAAGCTGGAACGCAT**A**TAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-MluI
ACCN: NM_133297

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_133297.2](#), [NP_579831.2](#)

RefSeq Size: 1537 bp

RefSeq ORF: 489 bp

Locus ID: 113922

UniProt ID: [Q923V8](#)

Cytogenetics: 2q44

Gene Summary: The protein encoded by this gene belongs to the SEP15/selenoprotein M family. The exact function of this protein is not known; however, it has been found to associate with UDP-glucose:glycoprotein glucosyltransferase (UGTR), an endoplasmic reticulum(ER)-resident protein, which is involved in the quality control of protein folding. The association with UGTR retains this protein in the ER, where it may play a role in protein folding. Knockout studies in mice also suggest a role for this gene in cataract formation and colon carcinogenesis. This protein is a selenoprotein, containing the rare amino acid selenocysteine (Sec). 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. [provided by RefSeq, Nov 2016]