

Product datasheet for **MG200498**

Selenoh (NM_001037279) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Selenoh (NM_001037279) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Selenoh
Synonyms: 2700094K13Rik; Se; Selh
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG200498 representing NM_001037279
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**C

ATGGCCCCCACGGAAGAAAGCGTAAGGCGGGGCGCGCCTATGGAGACGGTGGACAAGCGCGAGAAAC
 TGGCGAGGGCGCGACCGTGGTCATTGAGCATTGTACGAGCTGACGCGTGTACGGCCGCATGCTGCTGC
 CTTGAGCCAGGCTCTGCAACTGGAGGCCCCAGAGCTACCTGTGCAAGTGAACCCGTCAAACCGCGGAGG
 GGCAGCTTCGAGGTGACGCTGCTGCGCTCGGACAACAGCCGTGTTGAAGTCTGGACTGGTATTAAGAAGG
 GCCCTCCACGAAAGCTCAAATTCCTGAGCCTCAAGAGGTGGTTGAAGAATTGAAGAAGTACCTTTCA

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG200498 representing NM_001037279
 Red=Cloning site Green=Tags(s)

MAPHGRKRKAGAAPMETVDKREKLAEGATVVIEHCTS*RVYGRHAAALSQALQLEAPLPVQVNPSKPRR
 GSFEVTLRLSDNSRVELWTGIKGPRLKLFPEPQEVVEELKKYLS

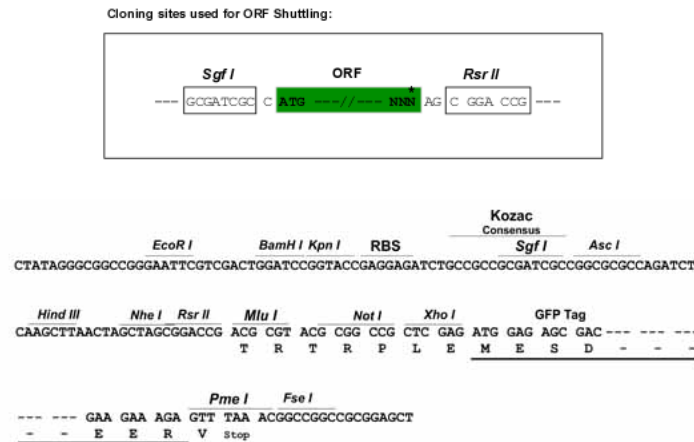
SGPTRRRLE - GFP Tag - V

Restriction Sites: Sgfl-RsrII



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Cloning Scheme:



ACCN: NM_001037279

ORF Size: 348 bp

OTI Disclaimer: 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. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

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.

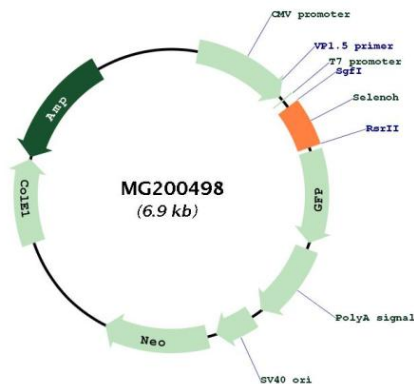
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001037279.2](#), [NP_001032356.1](#)

RefSeq Size: 672 bp
 RefSeq ORF: 351 bp
 Locus ID: 72657
 UniProt ID: [Q3UQA7](#)
 Cytogenetics: 2 D

Gene Summary: This gene encodes a nucleolar protein, which belongs to the SelWTH family. It functions as an oxidoreductase, and has been shown to protect neurons against UVB-induced damage by inhibiting apoptotic cell death pathways, promote mitochondrial biogenesis and mitochondrial function, and suppress cellular senescence through genome maintenance and redox regulation. This protein is a selenoprotein, containing the rare amino acid selenocysteine (Sec) at its active site. 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. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, May 2016]

Product images:



Circular map for MG200498