

Product datasheet for **MG200204**

Selenow (NM_009156) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Selenow (NM_009156) Mouse Tagged ORF Clone
Symbol: Selenow
Synonyms: selW; Sep; Sepw1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG200204 representing NM_009156
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGCTCGCCGTTTCGAGTCGTATTGTGGAGCTTGAGGCTATAAGCCCAAGTACCTCCAGCTCAAGG
 AGAAGCTAGAACATGAGTTCGCCGATGCCTGGACATTTGTGGCGAGGGGACTCCCCAGGTACCCGGTT
 CTTTGAAGTGACAGTAGCCGGAAAGTTGGTCCACTCCAAGAAGAGAGGTGATGGCTATGTGGATACAGAG
 AGCAAGTCCGAAACTGGTGACCGCCATCAAAGCTGCCTTGCTCAGTGCCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG200204 representing NM_009156
 Red=Cloning site Green=Tags(s)
 MALAVRVVYCGA*GYKPKYLQLKEKLEHEFPGLDICEGEGTPQVTGFFFEVTVAGKLVHSHKRGDGYVDTE
 SKFRKLVTAIKAALAQCQ

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:



ACCN: NM_009156

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](#) The expression of this clone is not guaranteed due to the nature of selenoproteins.

OTI Annotation: 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.

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:

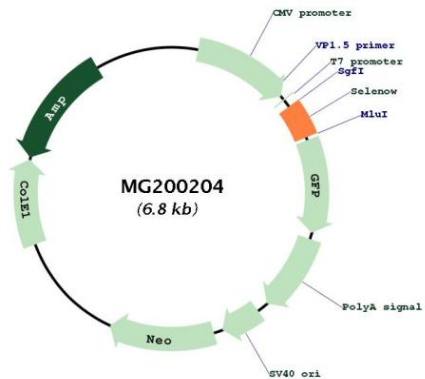
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_009156.2](#), [NP_033182.1](#)

RefSeq Size: 722 bp
 RefSeq ORF: 267 bp
 Locus ID: 20364
 UniProt ID: [P63300](#)
 Cytogenetics: 7 A2

Gene Summary: This gene encodes a selenoprotein containing a selenocysteine (Sec) residue, which 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 highly expressed in skeletal muscle and brain. It belongs to the SelWTH family, which possesses a thioredoxin-like fold and a conserved CxxU (C is cysteine, U is Sec) motif, and has been shown to function as a glutathione-dependent antioxidant in vivo. Studies in mouse suggest that this selenoprotein is involved in muscle growth and differentiation, and in the protection of neurons from oxidative stress during neuronal development. [provided by RefSeq, Apr 2017]

Product images:



Circular map for MG200204