

Product datasheet for MC202669

Selenow (NM 009156) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Selenow (NM 009156) Mouse Untagged Clone

Symbol: Selenow

Synonyms: selW; Sep; Sepw1

Mammalian Cell

Selection:

Neomycin

Vector: PCMV6-Kan/Neo (PCMV6KN)

E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >BC052719 sequence for NM_009156

Restriction Sites: Ascl-Notl **ACCN:** NM 009156

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.

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).



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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.

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

0.22um filter is required.

RefSeq: <u>BC052719</u>, <u>AAH52719</u>

 RefSeq Size:
 690 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]