

## Product datasheet for **MG201787**

### Selenos (NM\_024439) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Selenos (NM\_024439) Mouse Tagged ORF Clone  
**Symbol:** Selenos  
**Synonyms:** 1500011E07Rik; C78786; H-4; H-47; H4; H47; Se; Sels; Seps1; V; Vimp  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG201787 representing NM\_024439  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGATCGCC

ATGGATCGCGATGAGGAACCTCTGTCTCCGAGGCCGGCGCTGGAGACCGAGAGCCTGCGATTCTGCACG  
 TGACAGTGGGCTCCCTGCTGGCCAGCTATGGCTGGTACATCCTCTTCAGCTGCATCCTACTCTACATTGT  
 CATCCAGAGGCTCTCCCTTCGACTGAGGGCTTTGAGGCAGAGACAGCTGGACCAAGCCGAGACTGTTCTG  
 GAACCTGATGTTGTTGTTAAGCGACAAGAGGCTTTAGCAGCTGCTCGTTTGAAGATGCAGGAAGATCTAA  
 ATGCCCAAGTTGAAAAACATAAGGAAAACTAAGACAGCTTGAAGAAGAAAAAGAACAGAGATTGA  
 AATGTGGGACAGCATGCAAGAAGGCAGAAGTTACAAAAGAAATTCAGGAAGGCCTCAGGAAGAAGATGGT  
 CCTGGACCTTCTACTTCTGTTCATCCCCAAAGGAAAAATCTGACAAAAAGCCTTTGCGAGGAGGTGGTT  
 ATAACCCTCTGACGGGTGAAGGGGTGGAACCTGCTCCTGGAGACCTGGACGCAGGGGCCCATCATCTGG  
 TGGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG201787 representing NM\_024439  
Red=Cloning site Green=Tags(s)

MDRDEEPLSPRPALETESLRFHVTGVSLLASYGWYILFSCILLYIVIQRSLRLRALRQRQLDQAETVL  
 EPDVVVKRQEALAAARLRMQEDLNAQVEKHKEKLRQLEEEKRRQK IEMWDSMQEGRSYKRNSGRPQEEDG  
 PGPSTSSVIPKGSDDKPLRGGGYNPLTGEGGTCSWRPGRRGPSGG

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI



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Cloning Scheme:



ACCN: NM\_024439

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\\_024439.2](#)

RefSeq Size: 1208 bp

RefSeq ORF: 573 bp

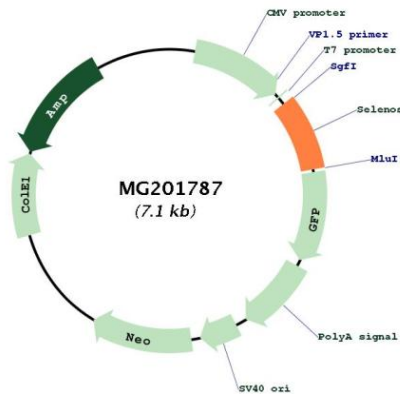
Locus ID: 109815

UniProt ID: [Q9BCZ4](#)

Cytogenetics: 7 35.49 cM

**Gene Summary:** This gene encodes a transmembrane protein that is localized in the endoplasmic reticulum (ER). It is involved in the degradation process of misfolded proteins in the ER, and may also have a role in inflammation control. 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. Two additional phylogenetically conserved stem-loop structures (Stem-loop 1 and Stem-loop 2) in the 3' UTR of this mRNA have been shown to function as modulators of Sec insertion (PMID:23614019). Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2017]

**Product images:**



Circular map for MG201787