

Product datasheet for **MC218987**

Selenon (NM_029100) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Selenon (NM_029100) Mouse Untagged Clone
Symbol:	Selenon
Synonyms:	1110019I12Rik; AI414492; Se; SeIN; Sepn1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

Fully Sequenced ORF: >MC218987 representing NM_029100
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGCCAGGCCAGGCCCGCAGCGCGCCGCCCGCACAGCCCGGACCCGGCGCTCAGCCCGCCTCCAC
 GCCGCCGCGCCCGCGCCCTGGCGCTGCTCGGAGCCCTGCTGGCGGCCCGCCGCTGTCGCCGCTGCCG
 GGCTGCGCGCTCCTCGCCGACGCCAGGCGGCCGCGCGCAGGAATCGGCATTAAGGTCTGGGACA
 GATGGCCTCTTTCTTTTCTCGCTGGACTGACCAGGATATGTACATCAGTCCGGAGGAATCAAAC
 CCATTGCGGAGAACTGACAGGGTCAGTTCCTGTGGCCAACTACGAGGAGGAGGAATGCCCATGACCC
 CAGCGAGGAGACTCTTACCATAGAAGCCGATTCCAGCCTCTGCTCATGGAGACCATGACAAAAGCAA
 GATGGCTTCTAGGGTCTCCCGCTCGCTCTGTCGGCCTCCGCAACTGGACCACAGCAGCCTCGCCGA
 GTGCAGCGTTTGCTGCCCGCCACTTCCGGCCCTTCTGCCCCCTCCAGGTGAGGAGCTGGCCAGCCCTG
 GTGGATTATCCCGGGGAGCTGAGCGTCTTACGGGCTATTTGTCCAACAACCGTTCTACCCACCACCG
 CCCAAGGCAAGGAGGTCATCATCCATCGCCTGTTAAGCATGTTCCATCCACGCCCTTCGTGAAGACCC
 GCTTTGCCCTCAGGGCACCGTGGCCTGTCTGACTGCCATCAGCGATTCTACTACACCGTGATGTTCCG
 GATCCACGCGGAGTTTACGCTCAGCGAGCCTCTGACTTCCCCTTCTGGTTCTCGCCCGCCAGTTCACC
 GGCCATATCATCTTATCCAAAGATGCTACACACATCCGTGACTTCAGGCTGTTTGTGCCAATCACAGGT
 CCCTGAATGTGGACATGGAGTGGCTGTATGGGGCCAGTGAGACCAGCAACATGGAGGTGGACATTGGCTA
 CGTCCCCCAGATGGAGCTGGAGGCTGTGGGCCCTCGGTGCCCTCTGTGATCCTAGATGAGGACGGCAAC
 ATGATTGACAGCCGCTGCCCTCAGGAGAACCCTCCAGTTTGTGTTTGGAGAGATCAAGTGGCATCAGG
 AGCTGAGCTGGGAAGAGGCTGCCCGCGCCTGGAGGTGGCCATGTATCCCTTCAAGAAGGTCAACTACCT
 GCCGTTACGGAGGCCTTTGACAGAGCCAGAGCTGAGAAGAACTTGTTCAATCCATCTTGCTGTGGGGG
 GCCCTGGACGACAGTCTGCTGAGGTTCCGGGCGGACTCTCCGGGAGACTGTCTGAAAAGCCCGCCA
 TCCTCACTCTCTCAATGAGAGTTCATCAGTACCTGGTCCCTGGTAAAGGAGCTAGAAGACCTGCAGAC
 CCAGCAGGAGAACCCTCCACAGGAGCTGGCAGGCCTGCCTTGGAGAAGTACAGCTTTCCTGTAGAG
 ATGATGATCTGTGCCCCAAGGACTGTGGTCCACCACATCAATGCCAACTACTTCTTGCATCACCT
 CCATGAAGCCTGAAGACATGGAGAATAAAGCTTTCAGCTTCTCATCCAGCTTGGAGACCCGTCAC
 AGCTACCTACATGCAGTTCCTGAGGGAAGGACTCCGGCGGGCCCTGCCCTCTCCAGCC**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_029100
- 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).

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_029100.2](#), [NP_083376.2](#)

RefSeq Size: 3461 bp

RefSeq ORF: 1674 bp

Locus ID: 74777

UniProt ID: [D3Z2R5](#)

Cytogenetics: 4 D3

Gene Summary: This gene encodes a glycoprotein that is localized in the endoplasmic reticulum. It plays an important role in cell protection against oxidative stress, and in the regulation of redox-related calcium homeostasis. Mutations in the orthologous gene in human are associated with early onset muscle disorders, referred to as SEPN1-related myopathy. Knockout mice deleted for this gene exhibit abnormal lung development. 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. A second stop-codon redefinition element (SRE) adjacent to the UGA codon has been identified in this gene (PMID:15791204). SRE is a phylogenetically conserved stem-loop structure that stimulates readthrough at the UGA codon, and augments the Sec insertion efficiency by SECIS. [provided by RefSeq, Dec 2016]