

## Product datasheet for **MR215232**

### Selenon (NM\_029100) Mouse Tagged ORF Clone

#### Product data:

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



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**ORF Nucleotide Sequence:**

>MR215232 representing NM\_029100  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGGCCAGGCCAGGCCCGCAGCGCGCCGCCCGCACAGCCCGGACCCCGCGCTCAGCCCGCCTCCAC  
 GCCGCCGCGCCCGCGCCCTGGCGCTGCTCGGAGCCCTGCTGGCGGCCCGCCGCTGTCGCCGCTGCCG  
 GGCTGCGCGCTCCTCGCCGACGCCAGGCGGCCGCGCGCAGGAATCGGCATTAAGGTCTGGGACA  
 GATGGCCTCTTTCTTTTCTCGCTGGACACTGACCAGGATATGTACATCAGTCCGGAGGAATCAAAC  
 CCATTGCGGAGAACTGACAGGGTCAGTTCCTGTGGCCAACTACGAGGAGGAGAACTGCCCATGACCC  
 CAGCGAGGAGACTCTTACCATAGAAGCCGATTCCAGCCTCTGCTCATGGAGACCATGACAAAAGCAAA  
 GATGGCTTCTAGGGTCTCCCGCTCGCTCTGTCGGCCTCCGCAACTGGACCACAGCAGCCTCGCCGA  
 GTGCAGCGTTTGTGCCGCCACTTCCGGCCCTTCTGCCCCCTCCAGGTGAGGAGCTGGCCAGCCCTG  
 GTGGATTATCCCGGGGAGCTGAGCGTCTTACGGGCTATTTGTCCAACAACCGTTCTACCCACCACCG  
 CCCAAGGCAAGGAGGTCATCATCCATCGCCTGTTAAGCATGTTCCATCCACGCCCTTCGTGAAGACCC  
 GCTTTGCCCTCAGGGCACCGTGGCCTGTCTGACTGCCATCAGCGATTCTACTACACCGTGATGTTCCG  
 GATCCACGCGGAGTTTACGCTCAGCGAGCCTCTGACTTCCCCTTCTGGTTCTCGCCCGCCAGTTCACC  
 GGCCATATCATCTTATCCAAAGATGCTACACACATCCGTGACTTCAGGCTGTTTGTGCCAATCACAGGT  
 CCCTGAATGTGGACATGGAGTGGCTGTATGGGGCCAGTGAGACCAGCAACATGGAGGTGGACATTGGCTA  
 CGTCCCCCAGATGGAGCTGGAGGCTGTGGGCCCTCGGTGCCCTCTGTATCCTAGATGAGGACGGCAAC  
 ATGATTGACAGCCGCTGCCCTCAGGAGAACCCTCCAGTTTGTGTTTGGAGAGATCAAGTGGCATCAGG  
 AGCTGAGCTGGGAAGAGGCTGCCCGCGCCTGGAGGTGGCCATGTATCCCTTCAAGAAGGTCAACTACCT  
 GCCGTTACGCGAGGCCTTTGACAGAGCCAGAGCTGAGAAGAACTTGTTCATTCCATCTTGCTGTGGGG  
 GCCCTGGACGACAGTCTGCTGAGGTTCCGGGCGGACTCTCCGGGAGACTGTCTGAAAGCCGCCCA  
 TCCTCACTCTCTCAATGAGAGTTCATCAGTACCTGGTCCCTGGTAAAGGAGCTAGAAGACCTGCAGAC  
 CCAGCAGGAGAACCCTCCACAGGAGCTGGCAGGCCTGCACTTGGAGAAGTACAGTTTCTGTAGAG  
 ATGATGATCTGTGCCAACGGCACTGTGGTCCACCACATCAATGCCAACTACTTCTTGCATCACCT  
 CCATGAAGCCTGAAGACATGGAGAATAAATACGTCTTACGCTTCTCATCCAGCTTGGAGACCCGTCAC  
 AGCTACCTACATGCAGTCTCTGAGGAAGGACTCCGGCGGGCCCTGCCCTCTCCAGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR215232 representing NM\_029100  
 Red=Cloning site Green=Tags(s)

MGQARPAARRPHSPDPGAQPAPRRRRARALALLGALLAAAAVAARACALLADAQAAARQESALKVLGT  
 DGLFLFSSLDTDQDMYISPEEFKPIAEKLTGSVPVANYEEEEELPHDPSEETLTIEARFQPLLMETMTKSK  
 DGFLGVSRLALSGLRNWTAAASPSAAFAARHFRPFLPPGQELGQPWWIIPGELSVFTGYLSNNRFYPPP  
 PKGKEVI IHRLLSMFHPRPFVKTRFAPQGTVACLAISDSYYTVMFRIHAEFQLSEPPDFPFWFSPGQFT  
 GHIILSKDATHIRDFRLFVFNHRSNLNVDMEWLYGASETSNMEVDIGYVPQMELEAVGPSVPSVILDEDGN  
 MIDSRLPSGEPQFVFEEIKWHQELSWEEAARRLEVAMYPFKKNVYLPFTEAFDRARAEEKLVHSILLWG  
 ALDDQSC\*GSGRTLRETVLESPPILTLLNESFISTWLVKELEDLQTQQENPLHRQLAGLHLEKYSFPVE  
 MMICLPLNGTVVHHINANYFLDITSMKPEDMENNVSFSSSFEDPSTATYMQFLREGLRRGLPLLQP

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9090\\_h11.zip](https://cdn.origene.com/chromatograms/mm9090_h11.zip)

**Restriction Sites:**

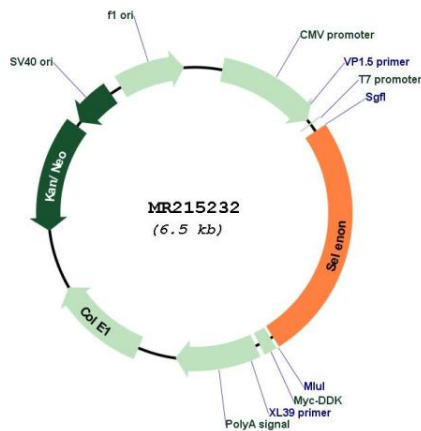
Sgfl-Mlul



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]

**Product images:**



Circular map for MR215232