

Product datasheet for **SC308326**

SEPN1 (SELENON) (NM_206926) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SEPN1 (SELENON) (NM_206926) Human Untagged Clone
Symbol:	SELENON
Synonyms:	CFTD; MDRS1; RSMD1; RSS; SELN; SEPN1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >SC308326 representing NM_206926.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGGGCCGGGCCCGCCGGGCCAACGCGGGCCGCCAGCCCCGGCCCCGGCCGCGCAGCCTCCCGGCCA
CCGCGCCGCGCCCGTCCCTGGCGTGTCTGGAGCCCTGCTGGCCGCGCCGCTGCCGCGCCGTC
CGGGTCTGCGCCCGCCACGCCGAGGCCAGGCGGCCGCGCGGCAGGAAGTGGCGCTGAAGACCTGGGG
ACAGATGGCCTTTTTCTTTTTCTCTTTCTCTTGACTGACGGGATATGTACATCAGCCCTGAGGAGTTC
AAACCCATTGCTGAGAAGCTAACAGGGTCAACTCCCGCGCCAGCTGCGAGGAGGAGGAGTTGCCCCCT
GACCCTAGCGAGGAGACGCTCACCATAGAAGCCCGATTCCAGCCTCTGCTCCCGGAGACCATGACCAAG
AGCAAAGATGGCTTCTAGGGTCTCCCGCTCGCCCTGTCGGCCTCCGAACTGGACAGCCGCCGCC
TCACCAAGTGCAGTGTGGCCACCCGCCACTTCCAGCCCTTCTTCCCCGCCAGCCAGGAGCTGGGT
GAGCCCTGGTGGATCATCCCAAGTGCAGTGCAGTGTTCAGTGGTACCTGTCCAACAACCGCTTCTAT
CCACCGCCGCCAAGGGCAAGGAGTGCATCCACCGGCTCCTGAGCATGTTCCACCCTCGGCCCTTT
GTGAAGACCCGCTTTGCCCTCAGGGAGCTGTGGCCTGCCTGACTGCCATCAGCGACTTCTACTACACT
GTGATGTTCCGGATCCATGCCGAGTTCAGCTCAGTGCAGCCGCCGACTTCCCCTTTTGGTTCTCCCT
GCTCAGTTCACCGGCCACATCATCTCTCAAAGACGCCACCCACGTCCGCGACTTCCGGCTCTTCGTG
CCCAACCACAGTCTCTGAATGTGGACATGGAGTGGCTTACGGGGCCAGTGAAGCAGCAACATGGAG
GTGGACATCGGCTACATACCCAGATGGAGTGGAGGCCACGGGGCCCTCTGTGCCTCCGTGATCCTG
GATGAGGATGGCAGCATGATCGACAGCCACCTGCCTTCCAGGGAGCCCTGCAGTTTGTGTTGAGGAG
ATCAAGTGGCAGCAGGAGCTGAGCTGGGAGGAGCTGCCCGCGCCTGGAGGTGGCCATGTACCCCTTC
AAGAAGTCTCCTACTTGGCGTTCAGTGGCCTTCGACCGAGCAAGGCTGAGAACAAGTGGTGGTGCAT
TCAATCCTGCTGTGGGGGGCCCTGGATGACCAAGTCTGCTGAGGTTCAAGGCGGACTCTCCGGGAGACT
GTCTGGAAGTTGCGCCATCCTCACCTGCTCAACGAGAGCTTTCATCAGCACCTGGTCCCTGGTGAAG
GAGCTGGAGAACTGCAGAAACAACAGGAGAACTCGTCCACAGAAAGTGGTGGCTGCACCTGGAG
AAGTACAGCTTCCCGTGGAGATGATGATCTGCCTGCCAATGGCACCGTGGTCCATCACATCAATGCC
AACTACTTCTGGACATCACCTCCGTGAAGCCCGAGGAAATCGAGAGCAATCTTTCAGCTTCTCATCC
ACCTTTGAAGACCCGTCCACGGCCACTACATGCAGTTCCTGAAGGAGGGACTCCGGCGTGGCTGCC
CTCCTCCAGCCTAG
ACGGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
  
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Restriction Sites: SgfI-MluI

Plasmid Map: □

ACCN: NM_206926

Insert Size: 1671 bp

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:	<ol style="list-style-type: none">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_206926.1
RefSeq Size:	4255 bp
RefSeq ORF:	1671 bp
Locus ID:	57190
UniProt ID:	Q9NZV5
Cytogenetics:	1p36.11
Protein Families:	Druggable Genome
MW:	62 kDa
Gene Summary:	<p>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 this gene are associated with early onset muscle disorders, referred to as SEPN1-related myopathy. SEPN1-related myopathy consists of 4 autosomal recessive disorders, originally thought to be separate entities: rigid spine muscular dystrophy (RSMD1), the classical form of multiminicore disease, desmin related myopathy with Mallory-body like inclusions, and congenital fiber-type disproportion (CFTD). 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. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Dec 2016]</p> <p>Transcript Variant: This variant (1) represents the predominant transcript and encodes the canonical isoform (1).</p>