

Product datasheet for SC118238

SELENOW (NM_003009) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SELENOW (NM_003009) Human Untagged Clone
Symbol:	SELENOW
Synonyms:	selW; SEPW1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC118238 sequence for NM_003009 edited (data generated by NextGen Sequencing)

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ATGGCTCTCGCCGTCGAGTCGTTTATTGTGGCGCTTGAGGCTACAAGTCCAAGTATCTT
CAGCTCAAGAAGAAGTTAGAAGATGAGTTCCCCGCGCCGCTGGACATCTCGCGCAGGGA
ACTCCCCAGGCCACCGGTTCTTTGAAGTGATGGTAGCCGGGAAGTTGATTAAGTCTAAG
AAGAAAGGCGATGGCTACGTGGACACAGAAAGCAAGTTTCTGAAGTTGGTGGCCGCCATC
AAAGCCGCTTGCTCAGGGCTAA
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Clone variation with respect to NM_003009.2

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_003009 unedited
GGATTTTGTATACGACTCACTATAGGCGCCGCGNATTCGGCACGAGGGTTAGTGTGGC
CCGGGCGTCCGCTCCTCAGCGGATGTGGCAGCCCCGAGCCATGGCTCTCGCCGTCGAGT
CGTTTATTGTGGCGCTTGAGGCTACAAGTCCAAGTATCTTCAGCTCAAGAAGAAGTTAGA
AGATGAGTTCCCGGCCGCTGGACATCTCGCGCAGGGAAGTCCAGGCCACCGGTT
CTTTGAAGTGATGGTAGCCGGGAAGTTGATTAAGTCTAAGAAAGGCGATGGCTACGT
GGACACAGAAAGCAAGTTTCTGAAGTTGGTGGCCGCCATCAAAGCCGCTTGCTCAGGG
CTAATGCGCCCTGAAGGCAGAGTCCAGGGACCTTGACCCAGCCCCTCAGCAGACGCTT
CATGATAGGAAGGACTGAAAAGTCTTGTGGACACCTGGTCTTTCCTGATGTTCTCGTGG
CTGCTGTTGGGGCAGAGATTGACGCCCCGGTCTTTGCCTCTGAGCGGGAGAGTCTGTG
TGTATGTGCTTCCCGGAATCCACACCACCCACCTCCTCCTGTCCTGTTTTCATC
ATATCTTTTGCATACCCATGTCTTCCCGAGTTGTCCTGGAGTTTGGGGGACATCC
CGCCTCAGGCATCCTTCTCAGGGGAAGCCAAGAGAGGGCATCAGATGGGTGGTTTCTGA
TTGTGGNCACGTTTGNACCGTTACGATTCAATAATATTGGATGAATTTAACCAAAAAA
AAAAAAAAAACTCGCTCTAGATTGCGGCCGCTCATTAGCTGTTCTGACAGATCCCGGTG
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_003009 unedited AATTCTGTCCGCGCCGCAATCTANATCGAGTTTTTTTTTTTTTTTTTTGGTTAAATTCA TCCAATATTTATTGAATCGTGAACGCTTGCAAACGTTGCCACAATCAGAAACCCACCCAT CCTGATGCCTCTCTTGGCTTCCCCTTTTGAAGGATGCCTGAGGCGGGATGTCCCCCAA CTCCCTGGGACAACCTGGGAAGACATGGGGTATGCAAAGAGATATGATGAAACACGGGA CAGGAGGAGGGTGGGGTGGTGGATTCCGGGAAGACACATACACAGACTCTCCCGC TCAGAGGCTAAGACCGGGGCGTCAATCTCTGCCCAACAGCAGCCACGAGAACCAGC GGAAAGACCAGGTGCCACAAGACTTTTTCAGTCTTTCTATCATGAAGCGCTGCTGAGA GGGGCTGGGTCAAGTCCCTGGACTCTGCCTTCAGGGCGCATTAGCCCTGAGCCAAGGCG GCTTTGATGGCGCCACCAACTTCAGAACTTGCTTTCTGTGTCCACGTAGCCCATCGCC TTTTTCTTAGAGTGAATCAACTTCCCGGCTACCATCACTTCAAAGAACCCGGTGGCCTC GGGAGTTCCTCCCGCAAATGTCCAGCCGGCCCGGAACCCCATCTTCTAATTCTTCT TGAGCCGAAGATACTTGGCATTGTACCCTCCAGTGCCACCACTAAACCACTCGGCCGGCG AGAGCCCTGGTTTCGGGGTGGCCCATCCGCTGGAGAAGGGGACGTCCCGGCCAAACTA ACTCCTCGTGCCCAATTCGGGGCGCCCTAAAACGAGGTCCTATTCCAAAATTTTGAGG GATACCAACGACCTCTGTTTCATCAGAACCCCAACGTTACAGCTTCCGGGCAATTTGC GCAACGGGCGCGTGTTTTTCCCCCCN
Restriction Sites:	NotI-NotI
ACCN:	NM_003009
Insert Size:	800 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_003009.2 , NP_003000.1
RefSeq Size:	893 bp
Locus ID:	6415
UniProt ID:	P63302
Cytogenetics:	19q13.33

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, heart 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, suggesting a redox function for this gene. Studies in mouse show that this selenoprotein is involved in muscle growth and differentiation, and in the protection of neurons from oxidative stress during neuronal development. A retroprocessed pseudogene of this locus has been identified on chromosome 1. [provided by RefSeq, Aug 2017]