

## Product datasheet for **RC219818**

### **SESN3 (NM\_144665) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	SESN3 (NM_144665) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SESN3
Synonyms:	SEST3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC219818 representing NM\_144665  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAACCGGGCGCGCCGAGCCCGTCGGCCCGCCAACCTACCTGCTCTGTACCAACTGCCGAAAGTGC  
 TCGCGAAGGATAAAAAGAAATCAGAGTGTCTCAACCCCTTGACAAGAGGACCAAGTGCCTTTATTCCAGAGAA  
 GGAAGTTGTCCAAGCAAACACAGTGGATGAACGTAACCTTTCTGTGGAAGAATACTCTACATCCGGT  
 CGTCTGGACAACATCACACAGGTCATGAGTTTACACACTCAGTACCTGGAGTCTTTCTTGGCAGCCAGT  
 TTTACATGTTGCGCATGGATGGTCCCCTTCTCTACCATACAGGCACTATATTGCAATAATGGCTGCAGC  
 TAGACATCAGTGTCTTACTTAATAAACATGCATGTGGATGAATTTTTAAAGACTGGAGGTATTGCTGAG  
 TGGTTGAATGGTTTGAATATGTGCCACAAAGACTGAAAAATCTAATGAAATTAATAAGCTGCTAGCAC  
 ATCGACCTTGGCTGATCACAAAAGAGCACATTAGAAAATGTCAAACTGGAGAAAATAATTGGTCTCT  
 GCCTGAACCTGGTACATGCTGTGGTCTCCTGGCACATTATCATGCTTTGGCAAGCTTTGTTTTGGTAGT  
 GGTATCAATCCAGAGAGAGATCCAGAAATCTCCAATGGATTCAGGCTAATATCAGTCAACAATTTCTGCG  
 TTTGTGATCTTGCTAATGACAACAACATAGAGAATGCATCTCTTTTCAGGCAGCAACTTTGGGATTGTGGA  
 TTCTCTAAGTGAGCTAGAGGCCTTAATGAAAAGGATGAAAAGACTTCAAGAAGAAAGGGAAGATGAAGAG  
 GCGTCTCAAGAAGAAATGAGCACTCGTTTTGAAAAGGAGAAGAAAGAAAGTCTTTTTGTGGTCTCTGGAG  
 ATACTTTTCATTCATTTCTCATTAGATTTTGGAGTGCATGATTATAACATCTGATGTCTCTCGATA  
 TATTGAAGACCTGGTTTTGGGTATGAAGACTTGGCAGACGAGGAGAAGAGCATTGCCAACATTCGA  
 GCTCAGGACTACCTGGGAAAATCATGGTTCTCCCTGGTGAACAGACTTTATTCTGACATTGGACATC  
 TTCTTGATGAAAAGTTTCGGATGGTCTACAATCTACATATAACACTATGGCCACCCATGAGGATGTTGA  
 CACAACCATGCTGCGCAGAGCTTTATTTAACTATGTTCACTGTATGTTTGAATCAGGTATGATGACTAT  
 GATTATGGAGAAGTTAATCAATTACTTGAAGAAGCCTGAAGTTTTACATTAAGACAGTGACCTGCTATC  
 CTGAGAGAACTACAAAACGCATGTATGATAGTTACTGGCGGCAGTTCAAACACTCAGAAAAAGTTTCATG  
 CAATCTACTTTTAAATGGAAGCACGAATGCAAGCTGAACCTCTTTATGCTCTTCGTGCCATAACTCGGCAT  
 TTGACC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC219818 representing NM\_144665  
 Red=Cloning site Green=Tags(s)

MNRGGSPSAAANYLLCTNCRKVLKDKRIRVSQPLTRGPSAFIPEKEVVQANTVDERTNFLVEEYSTSG  
 RLDNITQVMSLHTQYLESFLRSQFYMLRMDGPLPLPYRHVIAIMAAARHQCSYLINMHVDFLKTGGIAE  
 WLNGLYVPQRLKNLNEINKLLAHRPWLITKEHIQKLVKTGENNWSLPELVHAVVLLAHYHALASVFGS  
 GINPERDPEISNGFRLISVNNFCVCDLANDNNIENASLSGSNFGIVDSLSELEALMERMKRLQEEREDEE  
 ASQEEMSTRFEKEKESLFFVSGDTFHSFPHSDFEDDMIITSDVSRVIEDPGFGYEDFARRGEEHLPFR  
 AQDYTWENHGFSLVNRLYSDIGHLLDEKFRMVNLTNTMATHEDVDTTMLRRALFNVVHCFMGIRYDDY  
 DYGEVNQLLERSLKVYIKVTVCYPERTTKRMYDSYWRQFKHSEKVHVNLLLMEARMQAELLYALRAITRH  
 LT

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8018\\_g12.zip](https://cdn.origene.com/chromatograms/mk8018_g12.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_144665

**ORF Size:** 1476 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

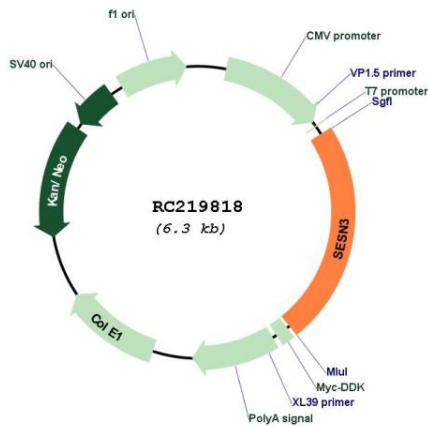
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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\\_144665.4](#)  
**RefSeq Size:** 1987 bp  
**RefSeq ORF:** 1479 bp  
**Locus ID:** 143686  
**UniProt ID:** [P58005](#)  
**Cytogenetics:** 11q21  
**Domains:** PA26  
**Protein Pathways:** p53 signaling pathway  
**MW:** 57.1 kDa

**Gene Summary:** This gene encodes a member of the sestrin family of stress-induced proteins. The encoded protein reduces the levels of intracellular reactive oxygen species induced by activated Ras downstream of RAC-alpha serine/threonine-protein kinase (Akt) and FoxO transcription factor. The protein is required for normal regulation of blood glucose, insulin resistance and plays a role in lipid storage in obesity. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2012]

**Product images:**



Circular map for RC219818