

## Product datasheet for RC232701

### SESN1 (NM\_001199934) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SESN1 (NM_001199934) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SESN1
Synonyms:	PA26; SEST1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC232701 representing NM_001199934 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCATGCTTTATTTGCAGATTCTTTTGTCTGCTTTGGGCCGTTGGATAACATTACGTTAGTGATGGTTT  
TCCACCCACAATATTTAGAAAGTTTCTTAAAACTCAGCACTATCTACTGCAAATGGATGGGCCGTTACC  
CCTACATTATCGTCACTACATTGGAATAATGGCTGCGGCAAGACATCAGTGCTCCTACTAGTGAACCTG  
CATGTAATGATTTCTTCATGTTGGTGGGACCCCAAGTGGCTCAATGGTTTAGAGAATGCTCCTCAA  
AACTACAGAATTTAGGAGAACTTAAACAAAGTGTAGCCATAGACCTTGGCTTATTACCAAAGAACACAT  
TGAGGGACTTTTAAAAGCTGAAGAGCACAGCTGGTCCCTTGCGGAATTGGTACATGCAGTAGTTTACTC  
ACACACTATCATTCTCTTGCCTCATTACATTCGGCTGTGGAATCAGTCCAGAAATTCATTGTGATGGTG  
GCCACACATTAGACCTCCTTCTGTTAGCACTACTGCATCTGTGACATTACAAATGGCAATCACAGTGT  
GGATGAGATGCCGGTCAACTCAGCAGAAAATGTTTCTGTAAGTGATTCTTCTTTGAGGTTGAAGCCCTC  
ATGGAAAAGATGAGGCAGTTACAGGAATGTGAGATGAAGAAGGCAAGTCAGGAAGAGATGGCTTAC  
GTTTTGAAAATAGAAAAAGAGAGAGATGTTTGTCTTCTTTCAGATGATGAAGAAGTTACACCAGCAAG  
AGCTGTATCTCGTCATTTTGGAGTACTAGTTATGGCTATAAAGATTTCTCTAGACATGGGATGCATGTT  
CCAACATTTCTGTTCCAGGACTATTGCTGGGAAGATCATGGTTATTCTTTGGTAAATCGCCTTTATCCAG  
ATGTGGGACAGTTGATTGATGAAAAATTCACATTGCTTACAATCTTACTATAATAACAATGGCAATGCA  
CAAAGATGTTGATACCTCAATGCTTAGACGGGCAATTTGGAAGTATTTCACTGCATGTTTGGAAATAAGA  
TATGATGATTGACTATGGTGAATTAACCAGCTATTGGATCGTAGCTTTAAAGTTTATATCAAACTG  
TTGTTTGCCTCCTGAAAAGTTACCAAAGAATGTATGATAGCTTCTGGAGGCAGTTCAAGCACTCTGA  
GAAGGTTTCATGTTAATCTGCTTCTTATAGAAGCTAGGATGCAAGCAGAACTCCTTTATGCTCTGAGACCC  
ATTACCCGCTATATGACC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC232701 representing NM\_001199934  
 Red=Cloning site Green=Tags(s)

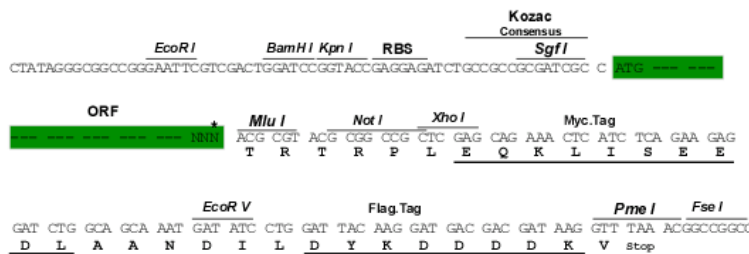
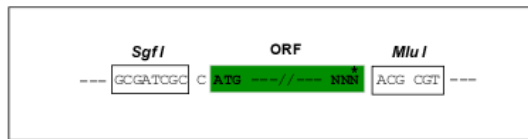
MHALFADSF AALGRLDNITLVMVFHPQYLESFLKTQH YLLQMDGPLPLHYRHYIGIMAAARHQCSYLVNL  
 HVNDFLHVGGDPKWLNGLENAPQKLQNLGELNKVLAHRPWLITKEHIEGLLKAEHWSLAE LVHAVVLL  
 THYHSLASF TFGCGISPEIHCDDGGHTFRPPSVSNYCIDITNGNHSVDMPVNSAENVSVD SFFVEVAL  
 MEKMRQLQECRDEEEASQEEMASRFEIEKRESMFVFS SDDDEE VTPARAVSRHFEDT SYGYKDFSRHGMHV  
 PTFRVQDYCWEDHGYSLVNRLYPDVGLIDEK FHIAYNLTYNTMAMHKD VDT SMLRRAIWNYIHC MFGIR  
 YDDYDGEINQLLDRSFKVYIKTVVCTPEKVTKRMYDSFWRQFKHSEKVHVNLLL IEARMQAELL YALRA  
 ITRYMT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**  
**Cloning Scheme:**

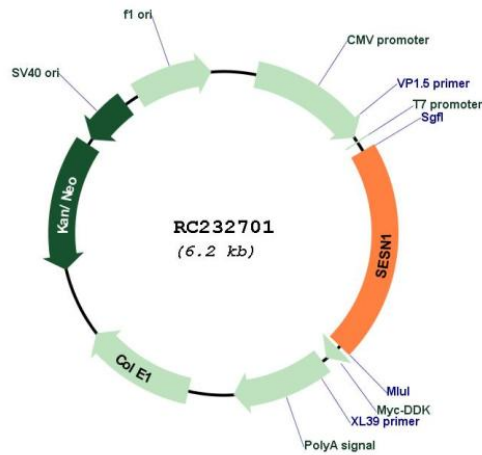
SgfI-MluI

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**



**ACCN:** NM\_001199934

<b>ORF Size:</b>	1278 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001199934.1</a> , <a href="#">NP_001186863.1</a>
<b>RefSeq Size:</b>	2740 bp
<b>RefSeq ORF:</b>	1281 bp
<b>Locus ID:</b>	27244
<b>UniProt ID:</b>	<a href="#">Q9Y6P5</a>
<b>Cytogenetics:</b>	6q21
<b>Protein Pathways:</b>	p53 signaling pathway
<b>MW:</b>	50.1 kDa
<b>Gene Summary:</b>	This gene encodes a member of the sestrin family. Sestrins are induced by the p53 tumor suppressor protein and play a role in the cellular response to DNA damage and oxidative stress. The encoded protein mediates p53 inhibition of cell growth by activating AMP-activated protein kinase, which results in the inhibition of the mammalian target of rapamycin protein. The encoded protein also plays a critical role in antioxidant defense by regenerating overoxidized peroxiredoxins, and the expression of this gene is a potential marker for exposure to radiation. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Dec 2010]