OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG232701

SESN1 (NM_001199934) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SESN1 (NM_001199934) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SESN1
Synonyms:	PA26; SEST1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG232701 representing NM_001199934
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCATGCTTTATTTGCAGATTCTTTTGCTGCTTTGGGCCGTTTGGATAACATTACGTTAGTGATGGTTT
TCCACCCACAATATTTAGAAAGTTTCTTAAAAACTCAGCACTATCTACTGCAAATGGATGGGCCGTTACC
CCTACATTATCGTCACTACATTGGAATAATGGCTGCGGCAAGACATCAGTGCTCCTACTTAGTGAACCTG
CATGTAAATGATTTCCTTCATGTTGGTGGGGACCCCAAGTGGCTCAATGGTTTAGAGAATGCTCCTCAAA
AACTACAGAATTTAGGAGAACTTAACAAAGTGTTAGCCCATAGACCTTGGCTTATTACCAAAGAACACAT
TGAGGGACTTTTAAAAGCTGAAGAGCACAGCTGGTCCCTTGCGGAATTGGTACATGCAGTAGTTTTACTC
ACACACTATCATTCTCTTGCCTCATTCACATTCGGCTGTGGAATCAGTCCAGAAATTCATTGTGATGGTG
GCCACACATTCAGACCTCCTTCTGTTAGCAACTACTGCATCTGTGACATTACAAATGGCAATCACAGTGT
GGATGAGATGCCGGTCAACTCAGCAGAAAATGTTTCTGTAAGTGATTCTTTCTTTGAGGTTGAAGCCCTC
ATGGAAAAGATGAGGCAGTTACAGGAATGTCGAGATGAAGAAGAGGCAAGTCAGGAAGAGATGGCTTCAC
GTTTTGAAATAGAAAAAAGAGAGAGTATGTTTGTCTTCTCTTCAGATGATGAAGAAGTTACACCAGCAAG
AGCTGTATCTCGTCATTTTGAGGATACTAGTTATGGCTATAAAGATTTCTCTAGACATGGGATGCATGTT
CCAACATTTCGTGTCCAGGACTATTGCTGGGAAGATCATGGTTATTCTTTGGTAAATCGCCTTTATCCAG
ATGTGGGACAGTTGATTGATGAAAAATTTCACATTGCTTACAATCTTACTTATAATACAATGGCAATGCA
CAAAGATGTTGATACCTCAATGCTTAGACGGGCAATTTGGAACTATATTCACTGCATGTTTGGAATAAGA
TATGATGATTATGACTATGGTGAAATTAACCAGCTATTGGATCGTAGCTTTAAAGTTTATATCAAAACTG
TTGTTTGCACTCCTGAAAAGGTTACCAAAAGAATGTATGATAGCTTCTGGAGGCAGTTCAAGCACTCTGA
GAAGGTTCATGTTAATCTGCTTCTTATAGAAGCTAGGATGCAAGCAGAACTCCTTTATGCTCTGAGAGCC
ATTACCCGCTATATGACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

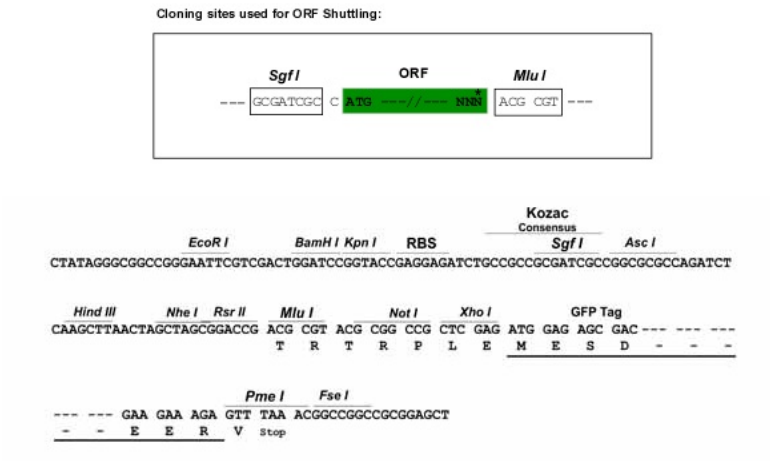
>RG232701 representing NM_001199934
Red=Cloning site Green=Tags(s)

MHALFADSFAALGRLDNITLVMVFHPQYLESFLKTQHYLLQMDGPLPLHYRHYIGIMAAARHQCSYLVNL
HVNDFLHVGGDPKWLNGLENAPQKLQNLGELNKVLAHRPWLITKEHIEGLLKAEEHSWSLAELVHAVVLL
THYHSLASFTFGCGISPEIHCDGGHTFRPPSVSNYCICDITNGNHSVDEMPVNSAENVSVSDSFFEVEAL
MEKMRQLQECRDEEEASQEEMASRFEIEKRESMFVFSSDDEEVTPARAVSRHFEDTSYGYKDFSRHGMHV
PTFRVQDYCWEDHGYSLVNRLYPDVGQLIDEKFHIAYNLTYNTMAMHKDVDTSMLRRAIWNYIHCMFGIR
YDDYDYGEINQLLDRSFKVYIKTVVCTPEKVTKRMYDSFWRQFKHSEKVHVNLLLIEARMQAELLYALRA
ITRYMT

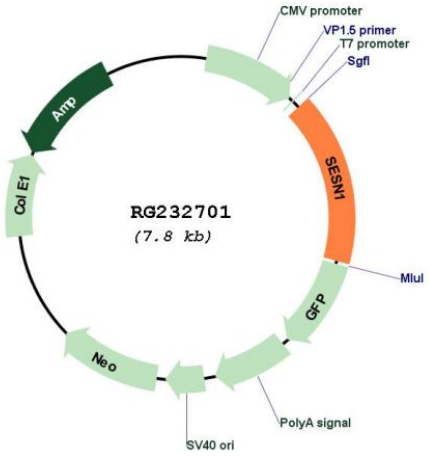
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001199934

ORF Size:	1278 bp
OTI Disclaimer:	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_001199934.1, NP_001186863.1
RefSeq Size:	2740 bp
RefSeq ORF:	1281 bp
Locus ID:	27244
UniProt ID:	Q9Y6P5
Cytogenetics:	6q21
Protein Pathways:	p53 signaling pathway
Gene Summary:	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]