

Product datasheet for **MC203553**

Sesn1 (NM_001013370) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sesn1 (NM_001013370) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Sesn1
Synonyms:	1110002G11Rik; AU044290; Pa26; Sest1
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

Fully Sequenced ORF: >BC055753
 TGAAGCGCTGCAGCGACAGATCGCGGCCGAGCCGTCCCTTCGACATGCGCCTGGCCGCCGCGTCGAAACG
 AGGCGTACGCAGCCTCGCTGGCTGTCTCCGAGCTGCTGAGCTGCCACCAGTGCGGCGGGGACCGCGGCCA
 GGACGAGGAACCTGGAATCAGAAATCCCTCGGCCACTAGGACACGGACCAAGCAGGTTTCATCCCAGAGAAG
 GAGATGCTGCAGGTGGGCAGTGAAGACGCACAGATGCATGCGTATTTGCAGACTCCTTTGCTGCTTTGG
 GTCGTCTGGATAACATCACATTAGTGTGTTTCCATCCACAATATTTAGAAAAGTTTCTTAAAGACTCA
 AACTACCTACTACAAATGGATGGGCCATTACCCCTCCATTATCGGCACTACATTGGAATCATGGCGGCA
 CGGAGGCATCAGTGTTCCTACCTGGTGAATCTGCATGTCAGTGACTTTCTTCATGTTGGTGGGACCCCA
 AGTGGCTCAATGGTTTAGAGAATGCTCCTCAAAAAGTGCAGAACTTAGGAGAAGTTAACAAGTGTAGC
 CCATAGGCCTTGCTGATTACCAAAGAACATATCGAGGGCCTTCTGAAAGCAGAGGAGCAGACTGGTCT
 CTCGCCGAGCTGGTCCATGCCGTGGTTCTGCTCACACACTACCACTCTCTTGCTCCTTACATTTGGCT
 GTGGAATTAGTCCAGAGATTCAATGCGATGGTGGCCACACCTTCCAGACCGCCTTCTGTTAGTAACTACTG
 CATCTGTGACATTACAAATGGCAATCACAGTGTGGATGAGATGCAAGTCAACTCAGCAGGAAATGCTTCG
 GTAAGTGATTCCTTCTTTGAGGTGGAAGCTCTCATGAAAAGATGAGGCAGTTACAGGAATGCCGAGAGG
 AGGAGGAGGCTAGCCAGGAGGAGATGGCGTCGCGGTTTGAGATGAAAAGAGAGAGAGCATGTTTGTCTT
 CTCTTCGACGATGATGAAGTTACACCAGCAAGAGATGTGTCTCGGCACTTTGAGGACACTAGTTACGGC
 TACAAGGATTTCTCCAGACACGGGATGCATGTCCCAACGTTTCGTGTCCAGGACTACTGTGGGAAGACC
 ATGGTTACTCTCTGGTGAATCGTCTCTATCCAGATGTGGGACAGTTAATTGATGAGAAAATTTACATTCC
 TTACAATCTAACTTACAATACTATGGCCATGCACAAAAGATGTTGATACCTCAATGCTCAGACGGGCTATC
 TGGAACTATATCCACTGCATGTTTGAATACGATACGACGACTATGACTATGGGAAATTAACCAGCTGC
 TGGATCGTAGCTTTAAAGTTTACATCAAAACCGTCGTGTGCACCTCTGAAAAGGTTACAAAAGGATGTA
 TGACAGCTTCTGGAGGCAGTTCAAGCACTCTGAGAAGGTCCATGTTAATCTGCTTCTTATAGAAGCTAGG
 ATGCAAGCAGAACTCCTGTATGCTCTGAGAGCCATTACCCGGTATATGACCTGATGCCTCTCCTCCATTA
 AAGATGACCCTGGAATGAACAGCACATTTAGTGTACAAGGGGATGGAACCAAGAGCCCCAGGACCAACAG
 TAGATAAAAAGCATTCAAAAATCCATGTGCCACAATTCCTTTAGTGTCTGCTATTTTACTGTGGGATCTC
 ACTGCCTGTCTAGCAGTGAAGCTCGGCAGCTTTGGTGTAGAGCTGGGAAGAAAGGCTGCCGGCCACAG
 TGTTTTGCTTTTTGACAGACAGCAGAGATGCTGTGAAGTGTGTTTCAATACAGCAACTAGTAAATCTCCAG
 ATCCCATTGCTCTGATGTGACAAGGTGACAAGACAGAGTGCATAAAGACTGGGACGTGGCTACTAAGTTC
 ACACATGCGGAATTGAGTGGCGCTCGGTGCTGTGCGGGGATGAGCACATGGCTATTTGGCTGAGTGC
 TGCTACCACCTGAGCCCACGCCACACCTTGTGTGCTTTTGAATTGAACTCATGCGCATTATTTCTTGA
 TCTAAAAAAGCATAGAATTTTTACTCACAGCTCAGTCAAGACCGTGTGGCGGTAACAGTTCATTTCTTT
 CATTATAGTTTTTAAAATTCAGTTATTGGATGATATTGCAATGACATTCTTAAAAGATTTCTCCAAAGA
 GCAATCTTAAAATGATAGTGTGTTAATTATAAGGAAAACAGGCTATCTTTTGTGTCGTTTCCCAATAT
 TCTCTGAGCCTGGAGGACAGCTGTCTTGTGCGGGATTTTTGGTCCGGTGCCAACAATGTGGAAAATGTG
 GTTGACAGTCTGCTGCACAGGGAGTGCCAGGTGCATTCTGCCCCATGCCCTGCTGACCTCGGGACCCGAC
 TTTGAAGTTATACAGCTCCTTAAAGAATAAAGCTGGAAAATATTTTGTGAAAGTTATCATATTTGTATC
 TTGATTTACAAAATGCTAACTTTGAGATACAAACAGGTTTGGAAAAATGATTAAGTACTTTGTATT
 CTGGAACCGTAAATTTGAAAGTCTGTCAGTATTACTGGTATTTTTCAATAAAGAGTAATTTCCACA
 AAAAAAAAAAAAAAAAAA

- Restriction Sites:** Ascl-NotI
- ACCN:** NM_001013370
- Insert Size:** 1479 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).
- 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: [BC055753](#), [AAH55753](#)

RefSeq Size: 2608 bp

RefSeq ORF: 1479 bp

Locus ID: 140742

UniProt ID: [P58006](#)

Cytogenetics: 10 22.77 cM

Gene Summary: Functions as an intracellular leucine sensor that negatively regulates the TORC1 signaling pathway through the GATOR complex. In absence of leucine, binds the GATOR subcomplex GATOR2 and prevents TORC1 signaling. Binding of leucine to SESN2 disrupts its interaction with GATOR2 thereby activating the TORC1 signaling pathway (PubMed:25259925). This stress-inducible metabolic regulator may also play a role in protection against oxidative and genotoxic stresses. May positively regulate the transcription by NFE2L2 of genes involved in the response to oxidative stress by facilitating the SQSTM1-mediated autophagic degradation of KEAP1. May have an alkylhydroperoxide reductase activity born by the N-terminal domain of the protein. Was originally reported to contribute to oxidative stress resistance by reducing PRDX1. However, this could not be confirmed (By similarity).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (2) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at an alternate start codon, compared to variant 1. The encoded isoform (2) has a distinct N-terminus and is shorter than isoform 1.