

Product datasheet for **MR227266**

Sirt1 (NM_001159589) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sirt1 (NM_001159589) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sirt1
Synonyms:	AA673258; S; Si; Sir2; Sir2a; Sir2alpha; SIR2L1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide
Sequence:

>MR227266 representing NM_001159589
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGACGAGGTGGCGCTCGCCCTTCAGGCCGCGGCTCCCCTTCGCGGCGGCCGCATGGAGGCCG
 CGTCGCAGCCGGCGGACGAGCCGCTCCGCAAGAGGCCCGCCGAGACGGGCTGGCCTCGGGCGCAGCCC
 GGGCGAGCCGAGCGCAGCAGTGGCGCGCGCGGCGGGGTGTGAGGCGGCGAGCGCGCGGCCCGGCCG
 GCGCTGTGGCGGAGGCGGCGAGGGCGCGGCGAGCGGAGCGGGAGGCCCGCGCAGGCCGTGGCCG
 GGGACGGAGACAATGGGTCGGCCTGCGCGGGAGCCGAGGGCGGCTGACGACTTCGACGACGACGAGGG
 CGAGGAGGAGGACGAGCGGCGGCGCAGCGCGGCGCAGCGATCGGCTACCGAGGTCCATATACTTTT
 GTTCAGCAACATCTCATGATTGGCACCGATCCTCGAACAATTCTAAAGATTTATTACCAGAAAACAATC
 CTCACCTGAGCTGGATGATATGACGCTGTGGCAGATTGTTAATAATCCTTTTCAGAACCACAAAGCG
 GAAAAAAGAAAAGATATCAATACAATTGAAGATGCTGTGAAGTTACTGCAGGAGTGTAAAAAGATAATA
 GTTCTGACTGGAGCTGGGGTTTCTGTCTCTGTGGGATTCCTGACTTCAGATCAAGAGACGGTATCTATG
 CTCGCCTTGGCGGTGGACTTCCCAGACCTCCCAGACCCTCAAGCCATGTTTGATATTGAGTATTTAGAAA
 AGACCCAGACCATTTCTCAAGTTTGCAAAGGAAATATATCCCGACAGTTCAGCCGTCTCTGTGTAC
 AAATTCATAGCTTTGTCAGATAAGGAAGGAAACTACTTCGAAATATACTCAAAATATAGATACCTTGG
 AGCAGGTTGCAGGAATCCAAAGGATCCTTCAGTGTGATGGTTCCTTTGCAACAGCATCTTGCCTGATTTG
 TAAATACAAGTTGATTTGAAGCTGTTCTGTGGAGACATTTTTAATCAGGTAGTTCCTCGGTGCCATAGG
 TGCCAGCTGATGAGCCACTTCCATCATGAAGCCAGAGATTGTCTTCTTGGTAAAACCTACCAGAAC
 AGTTTCATAGAGCCATGAAGATGACAAAGATGAAGTTGACCTCCTCATTGTTATTGGATCTTCTCTGAA
 AGTGAGACCAGTAGCACTAATTCGAAGTTCTATACCCCATGAAGTGCCTCAAATATAATAAATAGGGAA
 CCTTTGCCTCATCTACATTTTGTGTAGAGCTCCTTGGAGACTGCGATGTTATAATTAATGAGTTGTGTC
 ATAGGCTAGTGGTGAATATGCCAACTTTGTTGTAACCTGTAAAGCTTTCAGAAATTAAGTAAAAACC
 TCCACGCCACAAAAGGAATTGGTTCAATTTATCAGAGTTGCCACCAACACCTCTTCATATTTGGAAGAC
 TCAAGTTCACCTGAAAGAACTGTACCACAAGACTCTTCTGTGATTGCTACACTTGTAGACCAAGCAACA
 ACAACAATGTTAATGATTTAGAAGTATCTGAATCAAGTTGTGGAAGAAAAACCACAAGAAGTACAGAC
 TAGTAGGAATGTTGAGAACATTAATGTGAAAAATCCAGATTTTAAGGCTGTTGGTCCAGTACTGCAGAC
 AAAAATGAAAGAACTTCAGTTGCAGAAACAGTGAGAAAAATGCTGGCCTAATAGACTTGAAGGAGCAGA
 TTAGTAAGCGGCTTGAGGTAATCAATACCTGTTTGTACCACCAATCGTTACATATCCACGGTGTCTGA
 GGTATACTCAGACTCTGAAGATGACGTCTTGTCTCTAGTTCTGTGGCAGTAACAGTGACAGTGGCACA
 TGCCAGAGTCCAAGTTTGAAGAACCCTTGAAGATGAAAGTGAATTTGAAGAATTCTACAATGGCTTGG
 AAGATGATACGGAGAGGCCCGAATGTGCTGGAGGATCTGGATTTGGAGCTGATGGAGGGGATCAAGAGGT
 TGTTAATGAAGCTATAGCTACAAGACAGGAATTGACAGATGTAACCTATCCATCAGACAAATCA

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR227266 representing NM_001159589
 Red=Cloning site Green=Tags(s)

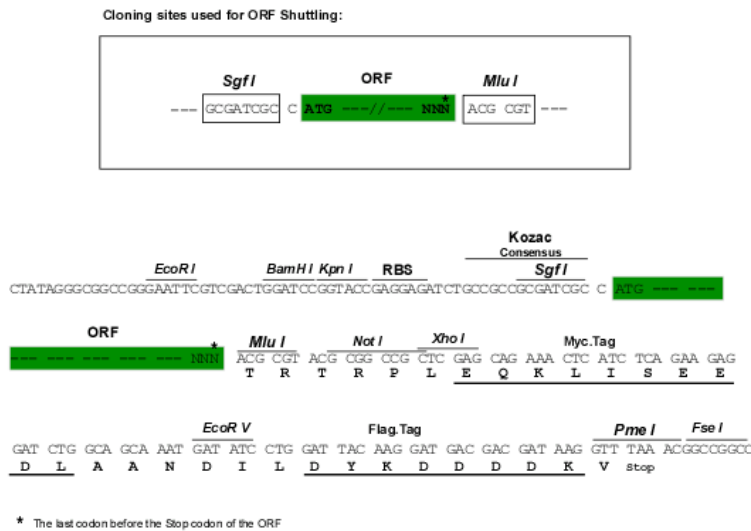
MADEVALALQAAGSPSAAAAAMEAASQPADEPLRKRPRRDGPGGLGRSPGEPSSAAVAPAAAGCEAASAAAPA
 ALWREAAGAAAASEREAPATAVAGDGDNGSGLRREPRAADDFDDEGEEDAAAAAIIIGYRGPYTF
 VQQHLMIGTDPRTILKDLLPETIPPELDDMTLWQIVINILSEPPKRRKRDINTIEDAVKLLQECKKII
 VLTGAGVSVSCGIPDFRSRDGIYARLAVDFPDLDPQAMFDIEYFRKDRPFKFAKEIYPGQFQPSLCH
 KFIALSDKEGKLLRNYTQNIIDTLEQVAGIQRILQCHGSFATASCLICKYKVDCEAVRGDIFNQVPRCPR
 CPADEPLAIMKPEIVFFGENLPEQFHRAMKYDKDEVDLLIVIGSSLKVRPVALIPSSIPHEVPQILINRE
 PLPHLHFDVELLDGCDVIINELCHRLGGEYAKLCCNPVKLSEITEKPPRPQKELVHLSLPPPLHISED
 SSSPERTVPQDSSVIATLVDQATNNNVNDLEVSESSCVEEKQEVQTSRNVENINVENPDFKAVGSSTAD
 KNERTSVAETVRKCWPNRLAKEQISKRLGNQYLFVPPNRYIFHGAEVYSDSEDDVLSSSSCGSNSDSGT
 CQSPSLEEPLDESEIEEFYNGLEDDTERPECAGSGFGADGGDQEVVNEAIATRQELTDVNYPSDKS

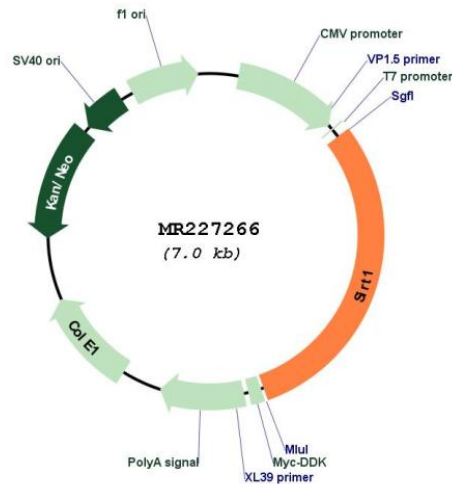
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001159589

ORF Size: 2094 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_001159589.2](#)

RefSeq Size: 3806 bp

RefSeq ORF: 2097 bp

Locus ID: 93759

Cytogenetics: 10 B4

MW: 76.5 kDa

Gene Summary: This gene encodes a member of the sirtuin family of proteins, characterized by their deacetylase activity and proposed role in longevity. The encoded protein regulates gene expression in a wide range of cell and tissue types through its NAD⁺-dependent deacetylation of histones, transcription factors and transcriptional coactivators. Brain-specific overexpression of this gene has been shown to result in increased median lifespan. Viability of homozygous knockout mice for this gene varies with strain background. Homozygous knockout mice of strains that do not exhibit embryonic lethality are sterile and have a reduced lifespan. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]