

Product datasheet for RC200190

SIRT3 (NM_012239) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SIRT3 (NM_012239) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SIRT3
Synonyms:	SIR2L3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200190 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGTTCTGGGGTTGGCGCGCCGCGGCAGCCCTCCGGCTGTGGGGCCGGGTAGTTGAACGGGTCGAGG
CCGGGGGAGGCGTGGGGCCGTTTCAGGCCCTGCGGCTGTCGGTGGTGCTTGGCGGCAGGGACGATGTGAG
TGCGGGGCTGAGAGGCAGCCATGGGGCCGCGGTGAGCCCTTGGACCCGGCGGCCCTTGCAGAGGCT
CCCAGACCCGAGGTGCCAGGGCATTCCGAGGCAGCCGAGGGCAGCAGCTCCAGTTTCTTCTTTTCGA
GTATTAAGGTGGAAGAAGTCCATATCTTTTTCTGTGGGTGCTCAAGTGTGTTGGAAGTGGAGGCAG
CAGTGACAAGGGGAAGCTTCCCTGCAGGATGTAGCTGAGCTGATTCGGGCCAGAGCCTGCCAGAGGGTG
GTGGTCATGGTGGGGCCGGCATCAGCACACCCAGTGGCATTCCAGACTTCAGATCGCCGGGAGTGGCC
TGTACAGCAACCTCCAGCAGTACGATCTCCCGTACCCGAGGCCATTTTTGAACTCCCATTTCTTTTCA
CAACCCCAAGCCCTTTTTCACTTTGGCCAAGGAGCTGTACCCTGGAAACTACAAGCCCAACGTCACCTCAC
TACTTTCTCCGGCTGCTTCATGACAAGGGGCTGCTTCTGCGGCTCTACACGCAGAACATCGATGGGCTTG
AGAGAGTGTGGGCATCCCTGCCTCAAAGCTGGTGAAGCTCATGGAACCTTGCCTCTGCCACCTGCAC
AGTCTGCCAAAGACCCTTCCCAGGGGAGGACATTCGGGCTGACGTGATGGCAGACAGGGTCCCCGCTGC
CCGGTCTGCACCCGGCTTGTGAAGCCGACATTGTGTTCTTTGGGAGCCGCTGCCCCAGAGGTTCTTGC
TGATGTGGTTGATTTCCCATGGCAGATCTGCTGCTCATCCTTGGGACCTCCCTGGAGGTGGAGCCTTT
TGCCAGCTTGACCGAGGCGGTGCGGAGCTCAGTCCCCGACTGCTCATCAACCGGACTTGGTGGGGCCC
TTGGCTTGGCATCCTCGCAGCAGGGACGTGGCCAGCTGGGGACGTGGTTACGGCGTGGAAAGCCTAG
TGGAGCTTCTGGGCTGGACAGAAGAGATGCGGGACCTTGTGCAGCGGAAACTGGGAAGCTTGTGGACC
AGACAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200190 protein sequence
Red=Cloning site Green=Tags(s)

MAFWGWRAAAALRLWGRVVERVEAGGGVGPFGACGCRLLVGGRRDVSAGLRGSHGARGEPLDPAAPLQRP
 PRPEVPRAFRRQPRAAAPSFSSSIKGGRRSISFSVGASSVVGSGGSSDKGKLSLQDVAELIRARACQRV
 VVMVGAGISTPSGIPDFRSPGSLYNSLQQYDLPYPEAIFELPFFHNPFPFFTLAKELYPGNYKPNVTH
 YFLRLLHDKGLLLRLYTQNIIDGLERLVSGIPASKLVEAHGTFASATCTVCQRPFPGEDIRADVMADRVPRC
 PVCTGVVKPDIVFFGEPLPQRFLLHVVDFFPMADLLLILGTSLEVEPFASL TEAVRSSVPRLLINRDLVGP
 LAWHPRSRDVAQLGDVVHGVESLVELLGWTEEMRDLVQRETGKLDGDPDK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6078_a11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_012239

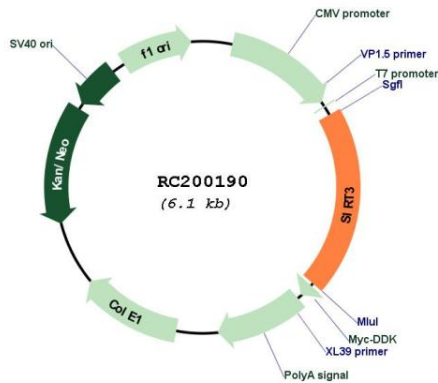
ORF Size: 1197 bp

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 or by calling 301.340.3188 option 3 for pricing and delivery.

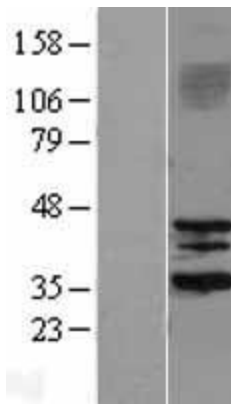
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<ol style="list-style-type: none">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_012239.6
RefSeq Size:	2919 bp
RefSeq ORF:	1200 bp
Locus ID:	23410
UniProt ID:	Q9NTG7
Cytogenetics:	11p15.5
Domains:	SIR2
Protein Families:	Druggable Genome, Transcription Factors
MW:	43.6 kDa
Gene Summary:	SIRT3 encodes a member of the sirtuin family of class III histone deacetylases, homologs to the yeast Sir2 protein. The encoded protein is found exclusively in mitochondria, where it can eliminate reactive oxygen species, inhibit apoptosis, and prevent the formation of cancer cells. SIRT3 has far-reaching effects on nuclear gene expression, cancer, cardiovascular disease, neuroprotection, aging, and metabolic control. [provided by RefSeq, May 2019]

Product images:



Circular map for RC200190



Western blot validation of overexpression lysate (Cat# [LY402174]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200190 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).