

Product datasheet for **SC311124**

SIRT3 (NM_001017524) Human Untagged Clone

Product data:

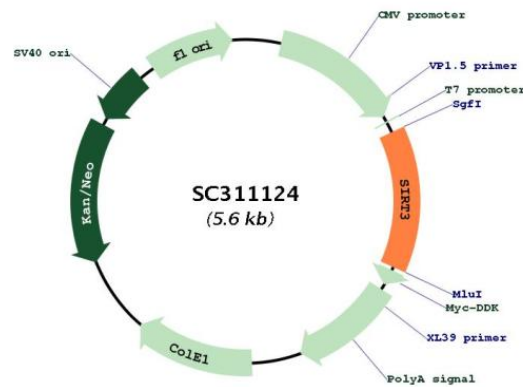
Product Type:	Expression Plasmids
Product Name:	SIRT3 (NM_001017524) Human Untagged Clone
Tag:	Tag Free
Symbol:	SIRT3
Synonyms:	SIR2L3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC311124 representing NM_001017524. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGTGGGGCCGGCATCAGCACACCCAGTGGCATTCCAGACTTCAGATCGCCGGGGAGTGGCCTGTAC
AGCAACCTCCAGCAGTACGATCTCCCGTACCCCGAGGCCATTTTGAACCTCCATTCTTCTTTCACAAC
CCCAAGCCCTTTTCACTTTGGCCAAGGAGCTGTACCCTGGAAACTACAAGCCCAACGTCACTCACTAC
TTTCTCCGGCTGCTTCATGACAAGGGGCTGCTTCTCGGGCTCTACACGCAGAACATCGATGGGCTTGAG
AGAGTGTCCGGCATCCCTGCCTCAAAGCTGGTTGAAGCTCATGGAACCTTTGCCTCTGCCACCTGCACA
GTCTGCCAAAGACCCTTCCAGGGGAGGACATTGGGGCTGACGTGATGGCAGACAGGGTTCCCGCTGC
CCGGTCTGCACCGCGTTGTGAAGCCCGACATTGTGTTCTTTGGGGAGCCGCTGCCCCAGAGGTTCTTG
CTGCATGTGGTTGATTTCCCATGGCAGATCTGCTGCTCATCCTTGGGACCTCCCTGGAGGTGGAGCCT
TTTGCCAGCTTGACCGAGGCCGTGCGGAGCTCAGTTCCCGACTGCTCATCAACCGGACTTGGTGGGG
CCCTTGGCTTGGCATCCTCGCAGCAGGGACGTGGCCAGCTGGGGGACGTGGTTACGGCGTGAAAGC
CTAGTGGAGCTTCTGGCTGGACAGAAGAGATGCGGGACCTTGTGCAGCGGGAACTGGGAAGCTTGT
GGACCAGACAAATAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
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Restriction Sites: Sgfl-MluI



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Plasmid Map:


ACCN: NM_001017524

Insert Size: 774 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001017524.2
RefSeq Size:	2773 bp
RefSeq ORF:	774 bp
Locus ID:	23410
UniProt ID:	Q9NTG7
Cytogenetics:	11p15.5
Protein Families:	Druggable Genome, Transcription Factors
MW:	28.6 kDa
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) uses an alternate splice site in the 5' end which causes the use of a downstream start codon, compared to variant 1. The resulting protein (isoform b) is shorter at the N-terminus compared to isoform a. Variants 2 and 9-11 all encode the same isoform (b).</p>