

Product datasheet for **SC127917**

SIRT1 (NM_012238) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SIRT1 (NM_012238) Human Untagged Clone
Tag:	Tag Free
Symbol:	SIRT1
Synonyms:	SIR2; SIR2alpha; SIR2L1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_012238, the custom clone sequence may differ by one or more nucleotides

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ATGGCGGACGAGGCGCCCTCGCCCTTCAGCCCGCGGCTCCCCCTCGGCGGCGGGGCGGACAGGGAGG
CCGCGTCGTCCCCCGCGGGGAGCCGCTCCGCAAGAGGCCGCGGAGAGATGGTCCCGCCCTCGAGCGGAG
CCCGGGCGAGCCCGGTGGGGCGGCCCCAGAGCGTGAGGTGCCGGCGCGGCCAGGGGCTGCCGGGTGCG
CGGGCGGCGCGCTGTGGCGGGAGGCGGAGGCAGAGCGGCGCGGCAGGCGGGGAGCAAGAGGCCAGG
CGACTGCGGCGGCTGGGAAGGAGACAATGGGCCGGGCTGCAGGGCCATCTCGGGAGCCACCGTGGC
CGACAACCTGTACGACGAAGACGACGACGACGAGGGCGAGGAGGAGGAAGAGGCGGCGGCGGCGGATT
GGGTACCGAGATAACCTTCTGTTGCGGTGATGAAATTATCACTAATGGTTTTTATTCTGTGAAAGTGATG
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TGTTCCAGAACATCTTATGATTGGCACAGATCCTCGAACAACTTAAAGATTTATTGCCGAAACAATA
CCTCCACCTGAGTTGGATGATATGACACTGTGGCAGATTGTTAATAATCCTTTCAGAACCACCAAAAA
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GAGCAGATTAGTAGGCGGCTTGATGGTAATCAGTATCTGTTTTTCCACCAAATCGTTACATTTCCATG
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AAGAGGCAATTAATGAAGCTATATCTGTGAAACAGGAAGTAACAGACATGAACTATCCATCAAACAATC
ATAG
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_012238 unedited
 GACTTCCGCCCGCTTGCAGGGCGGAGCGTAGGGATGGAGGTGGTATAAGCGAGCTCGTGT
 AGTGATCGTCAGAATTTTGTACCAGGGCAGTTGGAAGATGGCGGACGAGGCGGCCCTCGC
 CCTTCAGCCCGGGCGGCTCCCCCTCGGCGGCGGGGGCCACAGGGAGGCCGCGTCTGCCCC
 CGCCGGGAGCCGCTCCGCAAGAGGCCGCGGAGAGATGGTCCCGGCTCGAGCGGAGCCC
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 GGGTGCAGCGGCGGCGGCTGTGGCGGAGCGGAGGCGAGGCGGCGGCGGCGGCGGCGGCGG
 GGAGCAAGAGGCCAGGCGACTGCGGCGGCTGGGAAGGAGACAATGGGCGGCCGCTGCA
 GGGCCATCTCGGGAGCCACCGCTGGCCGACAATTGTACGACGAAGACGACGACGACGA
 GGGCGAGGAGGAAGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG
 CGGTGATGAAATTACTACTAATGGTTTTTATTCTGTGAAAGTATGAGGAGGATAGAGC
 CTCACATGCAAGCTCTAGTACTGGACTCCAAGGCCACGGATAGGTCCATATACTTTTGT
 TCAGCAACATCTTATGATTGGCACAGATCCTCGAACAATCTTAAAGATTTATTGCCGA
 AACAACTCCACCTGAGTTGGATGATATGACTGTGGCAGATTGTTATTATATCCTT
 TCAGAACCACAAAAAGAAAAAAGAAAAAGATATTAATACAATTGAGATGCTGTGAAAT
 TACTGCAGGAGTCAAAAAAATAAGTTCTAAGTGCAGCTGGGGTGTCTGCTTTTATGT
 AGAATACCTGACTGTCAAGGATGGTATTTAATGCTCGAC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_012238 unedited
 GCTACTGCCTACGATACTTGTATTTAAAAGTTGAAGGAAGAAAACCGATCATTACACACA
 GTCTACAAAACATATGCCAGTAAATTACATAAAAGACTATGTACAATATAAAAAGAGCTG
 AAAACAGTCTTACTGTAAAAATAATTTAAAACAACTTTTCAATTTAAAATATCATCTA
 TAGCACACAAACATCATGCAAAATGGAAAATAAATACTGCATTCTTTAGTGTAGCCAA
 ATAAATTCAGATTGAGACATCTTATAAGTAGGAAATGGCCATTCAATACGATTTTTTTC
 TCTGGCAGTAATGGTCTAGCTGGGTGTTTTATGCATAAAGAAGCAGTATATTTCAAACC
 CTTTTTATTGTAATAAATACTAAAGCAACAGAGGAATACTTTTAAATTTAGGAGTGATG
 TTCAAAAATGGTCTGAAAAATAAATGCTTACTGTGCAATTTATAAAGTATGAATTTCTT
 GAAAGACTAGAAGCTTTTGCAGCTGAGAAAGTTGATCTCTAGTTTTAAGGCAGGCTAAGC
 TTTTAAATAAAGATAAATTATAAGAAGTCTTCTCATTCACTAATTTCTGCTATTACAA
 GTTACATCATGTTTCATCTCCATAATACTAGGGCTAGCAGTTTGGTATTTAACACCAA
 ATCCTCCCAATGGGAGACATGTACTTTCTGGCTGAATTACAATTAACATCTTATTACTTT
 GGAAGTGTATAATCAGGGCCTGTTGCTCTCCTATTAATGAAAAACAGCAGTCCAAAAT
 ATTACTCTCCCGAGTAGAAGTACCATTATTATAGATTAGAAAAGGCTTTGCATATTCA
 CATTTTGCAGTTTAAATACTTGTGAAGTCAATGCAAGCTCTACACAGTGATAGTATTTA
 AACACATGCAATATTTCAAATAAGGGATCCAGCAGCCACTAATGTTTTCTAAGCACAC
 TTGAAAACATTC

Restriction Sites:

NotI-NotI

ACCN:

NM_012238

Insert Size:

4100 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
Components:	<p>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).</p>
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_012238.3 , NP_036370.2
RefSeq Size:	4107 bp
RefSeq ORF:	2244 bp
Locus ID:	23411
UniProt ID:	Q96EB6
Cytogenetics:	10q21.3
Domains:	SIR2
Protein Families:	Druggable Genome, Stem cell - Pluripotency, Transcription Factors
Gene Summary:	<p>This gene encodes a member of the sirtuin family of proteins, homologs to the yeast Sir2 protein. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. The functions of human sirtuins have not yet been determined; however, yeast sirtuin proteins are known to regulate epigenetic gene silencing and suppress recombination of rDNA. Studies suggest that the human sirtuins may function as intracellular regulatory proteins with mono-ADP-ribosyltransferase activity. The protein encoded by this gene is included in class I of the sirtuin family. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2008]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (a).</p>