

Product datasheet for RC215052

SIRT2 (NM_012237) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SIRT2 (NM_012237) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SIRT2
Synonyms:	SIR2; SIR2L; SIR2L2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215052 representing NM_012237 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGAGCCAGACCCCTCTCACCTCTGGAGACCCAGGCAGGGAAGGTGCAGGAGGCTCAGGACTCAG
ATTCAGACTCTGAGGGAGGAGCCGCTGGTGGAGAAGCAGACATGGACTTCTCGGAACTTATTCTCCCA
GACGCTCAGCCTGGGCAGCCAGAAGGAGCGTCTGCTGGACGAGCTGACCTTGAAGGGGTGGCCCGGTAC
ATGCAGAGCGAACGCTGTCGAGAGTCATCTGTTGGTGGGAGCTGGAATCTCCACATCCGAGGCATCC
CCGACTTTCGCTCTCCATCCACCGCCTCTATGACAACCTAGAGAAGTACCATCTCCCTACCCAGAGGC
CATCTTTGAGATCAGCTATTTCAAGAAACATCCGGAACCTTCTTCGCCCTCGCCAAGGAACTCTATCCT
GGGCAGTTCAGCAACCATCTGTCACTACTTCATGCGCCTGCTGAAGGACAAGGGGCTACTCCTGCGCT
GCTACACGCAGAACATAGATACCCTGGAGCGAATAGCCGGGCTGGAACAGGAGGACTTGGTGGAGGCGCA
CGGCACCTTCTACACATCACACTGCGTCAGCGCCAGCTGCCGGCACGAATACCCGCTAAGCTGGATGAAA
GAGAAGATCTTCTCTGAGGTGACGCCAAGTGTGAAGACTGTGAGAGCCTGGTGAAGCCTGATATCGTCT
TTTTTGGTGAAGCCTCCAGCGCTTCTTCTCCTGTATGCAGTCAGACTTCTGAAGGTGGACCTCCT
CCTGGTCATGGTACCTCCTTGCAGGTGCAGCCCTTTCCTCCCTCATCAGCAAGGACCCCTCTCCACC
CCTCGCTGCTCATCAACAAGGAGAAAGCTGGCCAGTCGGACCCCTTTCCTGGGATGATTATGGGCTCG
GAGGAGGCATGGACTTTGACTCCAAGAAGGCTACAGGGACGTGGCTGGCTGGGTGAATGCGACCAAGG
CTGCCTGGCCCTTGTGAGCTCCTTGGATGGAAGAAGGAGCTGGAGGACCTTGTCCGGAGGGAGCACGCC
AGCATAGATGCCAGTCGGGGCGGGGTCCCCAACCCAGCACTTACGCTTCCCCAAGAAGTCCCCGC
CACCTGCCAAGGACGAGGCCAGGACAACAGAGAGGGAGAAACCCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC215052 representing NM_012237
Red=Cloning site Green=Tags(s)

MAEPDPSHPLETQAGKVQEAQSDSDSEGGAGGEADMDFLRNFLFSQTL SLGSQKERLLDEL TLEGVARY
 MQSERCRRVICLVGAGISTSAGIPDFRSPSTGL YDNLEKYHLPYPEAIFEISYFKKHPEPFALAKELYP
 GQFKPTICHYFMRLLLKDKGLLLRCYTQNI DTLER IAGLEQEDLVEAHGTFYTHCVSASCRHEYP LSWMK
 EKIFSEVTPKCEDCQSLVKPDI VFFGESL PARFFSCMQSDFLKV D LLLVMGTS LQVQPFASLISKAPLST
 PRLLINKEKAGQSDPFLGMIMGLGGMD FDSKKAYRDVAWLGECDQGLALAE LLGWKKELEDLVRREHA
 SIDAQSGAGV PNPSTSASPKKSPPPAKDEARTTEREK PQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_012237

ORF Size: 1167 bp

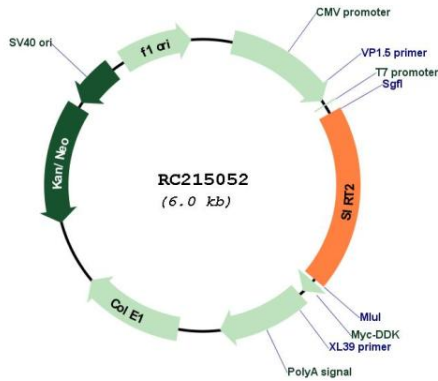
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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](#)

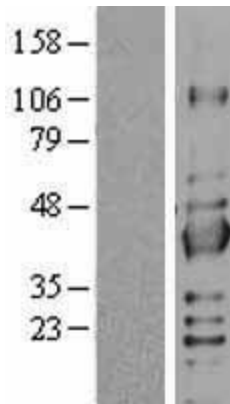
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>NM_012237.4</u>
RefSeq Size:	1963 bp
RefSeq ORF:	1170 bp
Locus ID:	22933
UniProt ID:	<u>Q8IXJ6</u>
Cytogenetics:	19q13.2
Domains:	SIR2
Protein Families:	Druggable Genome, Transcription Factors
MW:	43 kDa
Gene Summary:	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. Several transcript variants are resulted from alternative splicing of this gene. [provided by RefSeq, Jul 2010]

Product images:



Circular map for RC215052



Western blot validation of overexpression lysate (Cat# [LY402172]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215052 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).