

## Product datasheet for **MG204964**

### Sirt6 (NM\_181586) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sirt6 (NM_181586) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Sirt6
Synonyms:	2810449N18Rik; AI043036; Sir2l6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG204964 representing NM_181586 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCGGTGAATTATGCAGCAGGGTTGTCGCCTTACGCGGATAAGGGCAAGTGCGGGCTGCCGAGATCT  
TCGACCCACCAGAGGAGCTGGAACGCAAGGTGTGGGAGCTGGCCCGCTAATGTGGCAGTCTCCAGCGT  
GGTTTTCCACACGGGCGCCGGCATCAGCACCGCTCTGGCATCCCGACTTCAGAGGCCCCATGGCGTG  
TGGACCATGGAGAACCGGGCTGGCCCCAAGTTTGACACCACCTTCGAGAATGCTCGGCCCTCGAAGA  
CCCACATGGCCCTGGTTCAGCTAGAACGCATGGGCTTCCTCAGCTTCCTGGTCAGCCAGAACGTAGACGG  
GCTGCACGTGCGCTCGGGCTTCCCAGGACAAGCTGGCAGAGCTGCACGAAACATGTTTGTAGAGGAA  
TGTCCCAAGTGTAAAGACGAGTACGTACAGACACGGTTGTGGGCACCATGGGCCCAAGGCCACAGGCC  
GGCTCTGCACCGTGGCCAAGACCAGGGGACTTCGGGCCTGTAGAGGGGAGCTGAGAGACACCATTCTGGA  
CTGGGAGGACTCGTTGCCTGACCGGACCTGATGCTCGCTGATGAGGCCAGCAGGACCGCAGACCTGTCT  
GTCACCTGGGTACCTCGCTGCAGATCCGCCCCAGTGGGAACCTGCCCTTGCCACTAAGCGCCGAGGAG  
GCCGTCTGGTCATTGTCAACCTGCAACCCACAAAACATGACCGCCAGGCTGACCTGCGCATCCACGGCTA  
CGTGGATGAGGTGATGTGCAGACTCATGAAGCATCTGGGGCTGGAGATTCAGCCTGGGATGGACCCTGC  
GTGCTAGACAAAGCCCTGCCACCTCTGCCTCGCCAGTAGCACTCAAGGCTGAGCCCCCGTGCATCTCA  
ATGGTGCAGTGATGTTTCGTATAAGTCCAAGCCCAACAGCCCTATACTCCACAGGCCCCCAAAAGAGT  
GAAGACCGAGGCTGCCCCAGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG204964 representing NM\_181586  
 Red=Cloning site Green=Tags(s)

MSVNYAAGLSPYADK GKCGLP EIFDPPEELERK V WELARLMWQSSSVVFHTGAGISTASGIPDFRGP HGV  
 WTMEERGLAPKFDTT FENARPSKTHMALVQLERMGFLSFLVSNVDGLHVRSGFPRDKLAELHGNMFVEE  
 CPKCKTQYVRD TVVGTMLKATGRLCTVAKTRGLRACRGELRDTILDWEDSLPDRDLMLADEASRTADLS  
 VTLGTSLQIRPSGNLPLATKRRGGRLVI VNLQPTKHDRQADLRIHGYVDEVMCRMLMKHLGLEIPAWDGPC  
 VLDKALPPLPRPVALKAEPPVHLNGAVHVSYSKSPNSPILHRPPKRVKTEAAPS

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_181586

**ORF Size:** 1002 bp

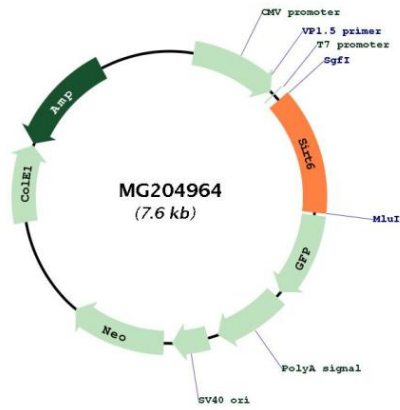
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of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

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_181586.4</a>
<b>RefSeq Size:</b>	1703 bp
<b>RefSeq ORF:</b>	1005 bp
<b>Locus ID:</b>	50721
<b>UniProt ID:</b>	<a href="#">P59941</a>
<b>Cytogenetics:</b>	10 39.72 cM
<b>Gene Summary:</b>	NAD-dependent protein deacetylase. Has deacetylase activity towards histone H3K9Ac and H3K56Ac. Modulates acetylation of histone H3 in telomeric chromatin during the S-phase of the cell cycle. Deacetylates histone H3K9Ac at NF-kappa-B target promoters and may down-regulate the expression of a subset of NF-kappa-B target genes. Deacetylation of nucleosomes interferes with RELA binding to target DNA. May be required for the association of WRN with telomeres during S-phase and for normal telomere maintenance. On DNA damage, promotes DNA end resection via deacetylation of RBBP8. Has very weak deacetylase activity and can bind NAD(+) in the absence of acetylated substrate (By similarity). Acts as a corepressor of the transcription factor Hif1a to control the expression of multiple glycolytic genes to regulate glucose homeostasis. Required for genomic stability. Required for normal IGF1 serum levels and normal glucose homeostasis. Modulates cellular senescence and apoptosis. Regulates the production of TNF protein. Has a role in the regulation of life span in male mice, but not in female mice.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG204964