

## **Product datasheet for MG227518**

## Sirt6 (NM 001163430) Mouse Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Sirt6 (NM\_001163430) Mouse Tagged ORF Clone

Tag: TurboGFP

Symbol: Sirt6

**Synonyms:** 2810449N18Rik; Al043036; Sir2l6

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >MG227518 representing NM\_001163430 Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG227518 representing NM\_001163430

Red=Cloning site Green=Tags(s)

MWQSSSVVFHTGAGISTASGIPDFRGPHGVWTMEERGLAPKFDTTFENARPSKTHMALVQLERMGFLSFL VSQNVDGLHVRSGFPRDKLAELHGNMFVEECPKCKTQYVRDTVVGTMGLKATGRLCTVAKTRGLRACRGE LRDTILDWEDSLPDRDLMLADEASRTADLSVTLGTSLQIRPSGNLPLATKRRGGRLVIVNLQPTKHDRQA DLRIHGYVDEVMCRLMKHLGLEIPAWDGPCVLDKALPPLPRPVALKAEPPVHLNGAVHVSYKSKPNSPIL HRPPKRVKTEAAPS

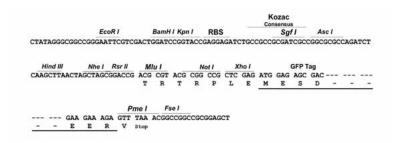
TRTRPLE - GFP Tag - V

**Restriction Sites:** 

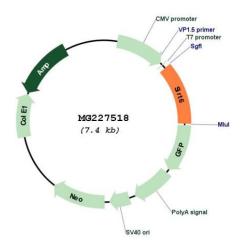
Sgfl-Mlul

**Cloning Scheme:** 





## Plasmid Map:



**ACCN:** NM\_001163430

ORF Size: 882 bp

## Sirt6 (NM\_001163430) Mouse Tagged ORF Clone - MG227518

**OTI Disclaimer:** 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:** 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 001163430.2

RefSeq Size: 1668 bp
RefSeq ORF: 885 bp
Locus ID: 50721

Cytogenetics: 10 39.72 cM

**Gene Summary:** 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]