

Product datasheet for MR227340L3V

OriGene Technologies, Inc.

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Sirt3 (NM_001177804) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Sirt3 (NM_001177804) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Sirt3

Synonyms: 2310003L23Rik; Al848213; Sir2l3

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK

ACCN: NM_001177804

ORF Size: 1002 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(MR227340).

Sequence:

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.

RefSeq: <u>NM 001177804.1</u>, <u>NP 001171275.1</u>

 RefSeq Size:
 1431 bp

 RefSeq ORF:
 1005 bp

 Locus ID:
 64384

 UniProt ID:
 Q8R104

Cytogenetics: 7 F4-F5







Gene Summary:

NAD-dependent protein deacetylase (PubMed:23835326, PubMed:17923681, PubMed:18794531, PubMed:21172655). Activates or deactivates mitochondrial target proteins by deacetylating key lysine residues (PubMed:23835326, PubMed:17923681, PubMed:18794531, PubMed:21172655). Known targets include ACSS1, IDH, GDH, PDHA1, SOD2, LCAD, SDHA and the ATP synthase subunit ATP5PO (PubMed:16790548, PubMed:18794531, PubMed:21172655). Contributes to the regulation of the cellular energy metabolism (PubMed:23835326). Important for regulating tissue-specific ATP levels (PubMed:18794531, PubMed:24252090). In response to metabolic stress, deacetylates transcription factor FOXO3 and recruits FOXO3 and mitochondrial RNA polymerase POLRMT to mtDNA to promote mtDNA transcription (PubMed:23283301).[UniProtKB/Swiss-Prot Function]