

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product datasheet for MR204397L4V

Sirt5 (NM_178848) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Sirt5 (NM_178848) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Sirt5
Synonyms:	0610012J09Rik; 1500032M05Rik; AV001953
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_178848
ORF Size:	933 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR204397).
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. <u>More info</u>
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 178848.3</u>
RefSeq Size:	1369 bp
RefSeq ORF:	933 bp
Locus ID:	68346
UniProt ID:	<u>Q8K2C6</u>
Cytogenetics:	13 A4



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Gene Summary:NAD-dependent lysine demalonylase, desuccinylase and deglutarylase that specifically
removes malonyl, succinyl and glutaryl groups on target proteins (PubMed:23806337,
PubMed:21908771, PubMed:22076378, PubMed:24315375, PubMed:24703693). Activates
CPS1 and contributes to the regulation of blood ammonia levels during prolonged fasting:
acts by mediating desuccinylation and deglutarylation of CPS1, thereby increasing CPS1
activity in response to elevated NAD levels during fasting (PubMed:19410549,
PubMed:24703693). Activates SOD1 by mediating its desuccinylation, leading to reduced
reactive oxygen species (By similarity). Activates SHMT2 by mediating its desuccinylation (By
similarity). Modulates ketogenesis through the desuccinylation and activation of HMGCS2
(PubMed:24315375). Has weak NAD-dependent protein deacetylase activity; however this
activity may not be physiologically relevant in vivo. Can deacetylate cytochrome c (CYCS) and
a number of other proteins in vitro such as Uox (PubMed:23085393).[UniProtKB/Swiss-Prot
Function]

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