

Product datasheet for TP504397

OriGene Technologies, Inc.

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Sirt5 (NM_178848) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse sirtuin 5 (Sirt5), with C-terminal MYC/DDK tag, expressed

in HEK293T cells, 20ug

Species: Mouse Expression Host: HEK293T

Expression cDNA >MR204397 protein sequence **Clone or AA Sequence**: Red=Cloning site Green=Tags(s)

MRPLLIAPGRFISQLCCRRKPPASPQSKICLTMARPSSNMADFRKCFANAKHIAIISGAGVSAESGVPTF RGAGGYWRKWQAQDLATPQAFARNPSQVWEFYHYRREVMRSKEPNPGHLAIAQCEARLRDQGRRVVVITQ NIDELHRKAGTKNLLEIHGTLFKTRCTSCGTVAENYRSPICPALAGKGAPEPETQDARIPVDKLPRCEEA GCGGLLRPHVVWFGENLDPAILEEVDRELALCDLCLVVGTSSVVYPAAMFAPQVASRGVPVAEFNMETTP

ATDRFRFHFPGPCGKTLPEALAPHETERTS

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-MYC/DDK

Predicted MW: 34.1 kDa

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling

conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 849179

Locus ID: 68346
UniProt ID: <u>Q8K2C6</u>





Sirt5 (NM_178848) Mouse Recombinant Protein - TP504397

RefSeq Size: 1369 Cytogenetics: 13 A4 RefSeq ORF: 933

Synonyms: 0610012J09Rik; 1500032M05Rik; AV001953

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]