

**SIRT5 Antibody**  
Rabbit mAb  
Catalog # AP90919

## Specification

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### SIRT5 Antibody - Product Information

Application	<b>WB</b>
Primary Accession	<a href="#">O9NXA8</a>
Clonality	<b>Monoclonal</b>
<b>Other Names</b>	
SIR2-like protein 5; SIR2L5; Sirt5; Sirtuin 5; Sirtuin type 5;	
Isotype	<b>Rabbit IgG</b>
Host	<b>Rabbit</b>
Calculated MW	<b>33881 Da</b>

### SIRT5 Antibody - Additional Information

Purification	<b>Affinity-chromatography</b>
Immunogen	<b>A synthesized peptide derived from human SIRT5</b>
Description	<b>The Silent Information Regulator (SIR2) family of genes is a highly conserved group of genes that encode nicotinamide adenine dinucleotide (NAD)-dependent protein deacetylases, also known as Class III histone deacetylases. SirT5, a mammalian homolog of Sir2, is localized to the mitochondria and has been implicated in the regulation of cell metabolism.</b>
Storage Condition and Buffer	<b>Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.</b>

### SIRT5 Antibody - Protein Information

**Name** SIRT5 {ECO:0000255|HAMAP-Rule:MF\_03160}

**Synonyms** SIR2L5

#### Function

NAD-dependent lysine demalonylase, desuccinylase and deglutarylase that specifically removes malonyl, succinyl and glutaryl groups on target proteins (PubMed:<a href="http://www.uniprot.org/citations/21908771" target="\_blank">21908771</a>, PubMed:<a href="http://www.uniprot.org/citations/22076378" target="\_blank">22076378</a>, PubMed:<a href="http://www.uniprot.org/citations/24703693" target="\_blank">24703693</a>, PubMed:<a href="http://www.uniprot.org/citations/29180469" target="\_blank">29180469</a>). 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:<a href="http://www.uniprot.org/citations/22076378" target="\_blank">22076378</a>, PubMed:<a href="http://www.uniprot.org/citations/24703693" target="\_blank">24703693</a>). Activates SOD1 by mediating its desuccinylation, leading to reduced reactive oxygen species (PubMed:<a href="http://www.uniprot.org/citations/24140062" target="\_blank">24140062</a>). Activates SHMT2 by mediating its desuccinylation (PubMed:<a href="http://www.uniprot.org/citations/29180469" target="\_blank">29180469</a>). Modulates ketogenesis through the desuccinylation and activation of HMGCS2 (By similarity). 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.

#### Cellular Location

Mitochondrion matrix. Mitochondrion intermembrane space. Cytoplasm, cytosol. Nucleus. Note=Mainly mitochondrial. Also present extramitochondrially, with a fraction present in the cytosol and very small amounts also detected in the nucleus [Isoform 2]: Mitochondrion {ECO:0000255|HAMAP- Rule:MF\_03160, ECO:0000269|PubMed:21143562}

#### Tissue Location

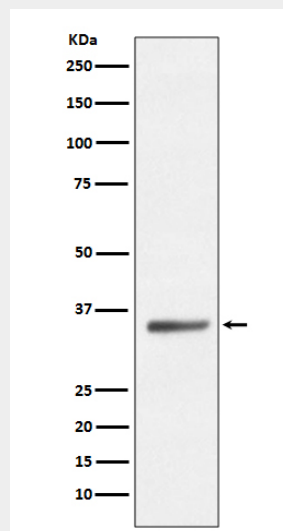
Widely expressed..

### SIRT5 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### SIRT5 Antibody - Images



Western blot analysis of SIRT5 expression in HeLa cell lysate.