

# SIRT5 Rabbit mAb

Catalog # AP76949

#### **Product Information**

Application WB
Primary Accession Q9NXA8

Reactivity Human, Mouse

**Host** Rabbit

**Clonality** Monoclonal Antibody

**Isotype** IgG

**Conjugate** Unconjugated

**Immunogen** A synthesized peptide derived from human SIRT5

**Purification** Affinity Chromatography

Calculated MW 33881

### **Additional Information**

**Gene ID** 23408

Other Names SIRT5

**Dilution** WB~~1/500-1/1000

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

#### **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:<u>21908771</u>, PubMed:<u>22076378</u>, PubMed:<u>24703693</u>,

PubMed:<u>29180469</u>). 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:<u>22076378</u>, PubMed:<u>24703693</u>). Activates SOD1 by mediating its desuccinylation, leading to reduced reactive oxygen species (PubMed:<u>24140062</u>). Activates SHMT2 by mediating its desuccinylation (PubMed:<u>29180469</u>). 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.

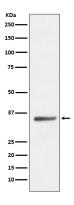
**Cellular Location** 

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..

## **Images**



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