

# **Anti-SIRT5/Sirtuin 5 Rabbit Monoclonal Antibody**

**Catalog # ABO13704** 

## **Specification**

## Anti-SIRT5/Sirtuin 5 Rabbit Monoclonal Antibody - Product Information

Application
Primary Accession
Host
Isotype
Reactivity
Clonality
Format

WB
Q9NXA8
Rabbit
Rabbit
Rabbit
Rabbit IgG
Human, Mouse
Monoclonal
Liquid

**Description** 

Anti-SIRT5/Sirtuin 5 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse.

## Anti-SIRT5/Sirtuin 5 Rabbit Monoclonal Antibody - Additional Information

#### Gene ID 23408

### **Other Names**

NAD-dependent protein deacylase sirtuin-5, mitochondrial { ECO:0000255|HAMAP-Rule:MF\_03160}, 2.3.1.- { ECO:0000255|HAMAP-Rule:MF\_03160}, ECO:0000269|PubMed:22076378, ECO:0000269|PubMed:24703693, ECO:0000269|PubMed:29180469}, Regulatory protein SIR2 homolog 5 { ECO:0000255|HAMAP-Rule:MF\_03160}, SIR2-like protein 5 { ECO:0000255|HAMAP-Rule:MF\_03160}, SIRT5 { ECO:0000255|HAMAP-Rule:MF\_03160}, SIR2L5

## Calculated MW 33881 MW KDa

**Application Details** WB 1:1000-1:2000

## **Subcellular Localization**

Mitochondrion matrix. Mitochondrion intermembrane space. Cytoplasm, cytosol. Nucleus. Mainly mitochondrial. Also present extramitochondrially: a fraction is present in the cytosol and very small amounts are also detected in the nucleus.

#### **Tissue Specificity**

Widely expressed..

#### **Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### **Immunogen**

A synthesized peptide derived from human SIRT5



**Purification**Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

## Anti-SIRT5/Sirtuin 5 Rabbit Monoclonal 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">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..

### Anti-SIRT5/Sirtuin 5 Rabbit Monoclonal Antibody - Protocols

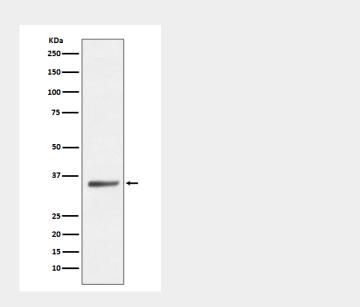
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation



- Flow Cytomety
- Cell Culture

# Anti-SIRT5/Sirtuin 5 Rabbit Monoclonal Antibody - Images



Western blot analysis of SIRT5 expression in HeLa cell lysate.