

Anti-SIRT5/Sirtuin 5 Rabbit Monoclonal Antibody Catalog # ABO13704

Specification

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

Application	WB
Primary Accession	Q9NXA8
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human, Mouse
Clonality	Monoclonal
Format	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:21908771, PubMed:22076378, PubMed:24703693, PubMed:29180469). 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:22076378, PubMed:24703693). Activates SOD1 by mediating its desuccinylation, leading to reduced reactive oxygen species (PubMed:24140062). Activates SHMT2 by mediating its desuccinylation (PubMed:29180469). 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..

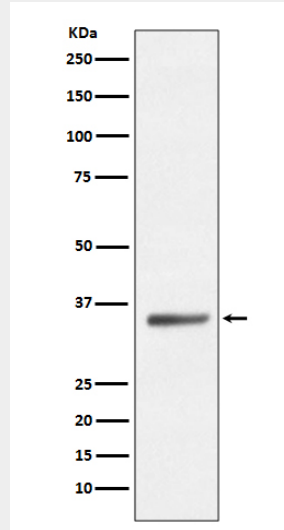
Anti-SIRT5/Sirtuin 5 Rabbit Monoclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-SIRT5/Sirtuin 5 Rabbit Monoclonal Antibody - Images



Western blot analysis of SIRT5 expression in HeLa cell lysate.