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Anti-SIRT5/Sirtuin 5 Rabbit Monoclonal Antibody

Catalog # ABO13704

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.

Additional Information

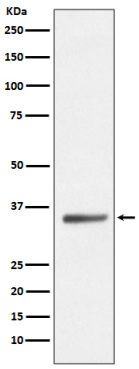
Gene ID	23408
Other Names	NAD-dependent protein deacylase sirtuin-5, mitochondrial {ECO:0000255|HAMAP-Rule:MF_03160}, 2.3.1.- {ECO:0000255|HAMAP-Rule:MF_03160, ECO:0000269|PubMed:22076378, ECO:0000269|PubMed:24703693, ECO:0000269|PubMed:29180469}, Regulatory protein SIR2 homolog 5 {ECO:0000255|HAMAP-Rule:MF_03160}, SIR2-like protein 5 {ECO:0000255|HAMAP-Rule:MF_03160}, SIRT5 {ECO:0000255|HAMAP-Rule:MF_03160}, SIR2L5
Calculated MW	33881
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..
Source	Eukaryota
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.
Clone Names	Clone: HHE-19
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.

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..

Images



Western blot analysis of SIRT5 expression in HeLa cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.