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SIRT5 Antibody

Rabbit mAb
Catalog # AP90919

Product Information

Application	WB
Primary Accession	Q9NXA8
Reactivity	Human, Mouse
Clonality	Monoclonal
Other Names	SIR2-like protein 5; SIR2L5; Sirt5; Sirtuin 5; Sirtuin type 5;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	33881

Additional Information

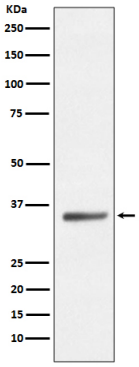
Dilution	WB 1:1000~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human SIRT5
Description	The Silent Information Regulator (SIR2) family of genes is a highly conserved group of genes that encode nicotinamide adenine dinucleotide (NAD)-dependent protein deacetylases, 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.
Storage Condition and Buffer	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.

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.