

SIRT5 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6244A**Specification**

SIRT5 Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	Q9NXA8
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	33881
Antigen Region	263-292

SIRT5 Antibody (C-term) - Additional Information**Gene ID** 23408**Other Names**

NAD-dependent protein deacylase sirtuin-5, mitochondrial
{ECO:0000255|HAMAP-Rule:MF_03160}, 351- {ECO:0000255|HAMAP-Rule:MF_03160}, 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

Target/Specificity

This SIRT5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 263-292 amino acids from the C-terminal region of human SIRT5.

Dilution

WB~~1:1000
IHC-P~~1:50~100
E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SIRT5 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SIRT5 Antibody (C-term) - 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

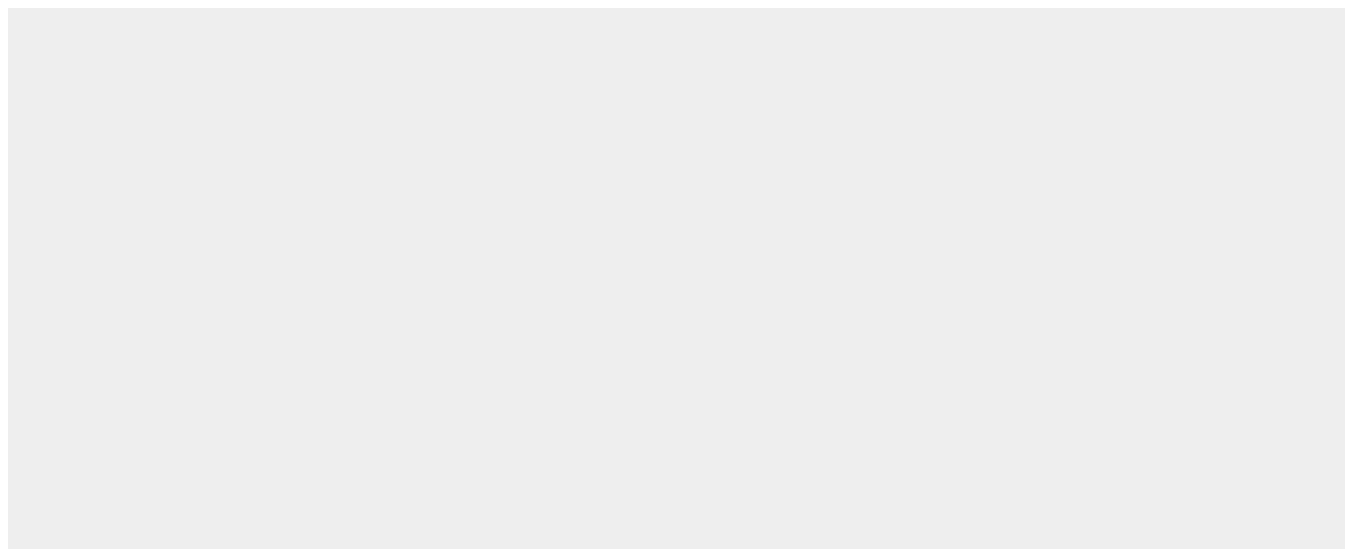
Widely expressed..

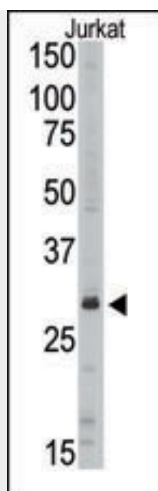
SIRT5 Antibody (C-term) - Protocols

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

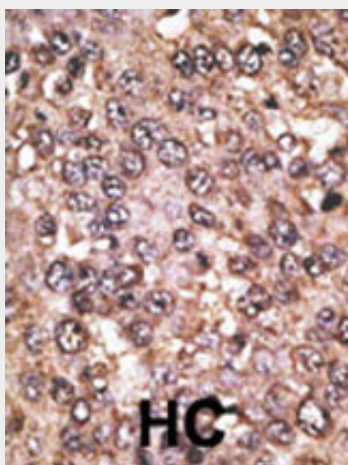
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SIRT5 Antibody (C-term) - Images





Western blot analysis of anti-SIRT5 Pab (Cat. #AP6244a) in Jurkat cell line lysate (35ug/lane). SIRT5 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

SIRT5 Antibody (C-term) - Background

SIRT5 is a member of the sirtuin family of proteins, homologs to the yeast Sir2 protein. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. The functions of human sirtuins have not yet been determined; however, yeast sirtuin proteins are known to regulate epigenetic gene silencing and suppress recombination of rDNA. Studies suggest that the human sirtuins may function as intracellular regulatory proteins with mono-ADP-ribosyltransferase activity.

SIRT5 Antibody (C-term) - References

Frye, R.A., Biochem. Biophys. Res. Commun. 273(2):793-798 (2000).
Frye, R.A., Biochem. Biophys. Res. Commun. 260(1):273-279 (1999).