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SIRT6 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP6245a

Specification

SIRT6 Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	O8N6T7
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Antigen Region	**290-319**

SIRT6 Antibody (C-term) - Additional Information

Gene ID 51548

Other Names
NAD-dependent protein deacetylase sirtuin-6, 351-, Regulatory protein SIR2 homolog 6, SIR2-like protein 6, SIRT6, SIR2L6

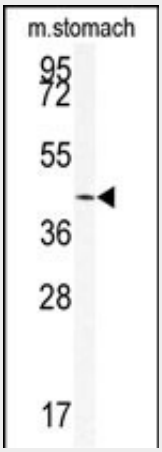
Target/Specificity
This SIRT6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 290-319 amino acids from the C-terminal region of human SIRT6.

Dilution
WB~~1:500
IHC-P~~1:50~100

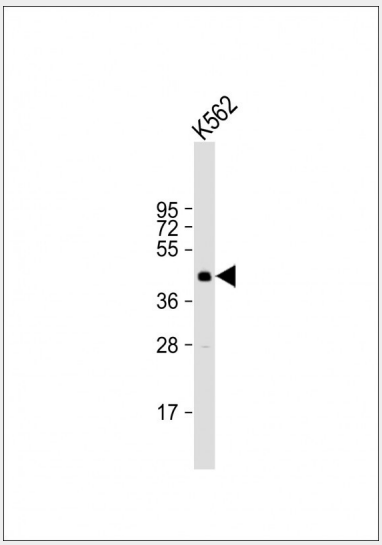
Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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
SIRT6 Antibody (C-term) is for research use only and not for use in diagnostic or



Western blot analysis of SIRT6 Antibody (C-term) (Cat.#AP6245a) in mouse stomach tissue lysates (35ug/lane). SIRT6 (arrow) was detected using the purified Pab.



Anti-SIRT6 Antibody (C-term) at 1:500 dilution + K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 39 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

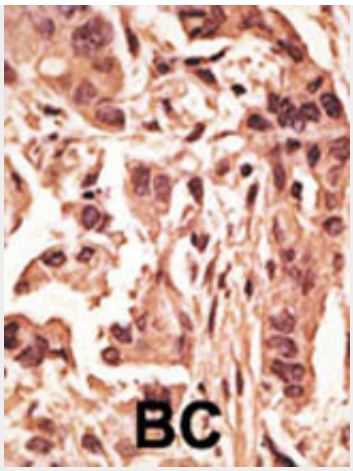
therapeutic procedures.

SIRT6 Antibody (C-term) - Protein Information

Name SIRT6

Synonyms SIR2L6

Function
NAD-dependent protein deacetylase involved in various processes including telomere maintenance and gene expression, and consequently has roles in genomic stability, cell senescence and apoptosis (PubMed:18337721, PubMed:19135889, PubMed:19625767, PubMed:21362626). Has very weak deacetylase activity and can bind NAD(+) in the absence of acetylated substrate (PubMed:21362626). Has deacetylase activity towards histone H3K9Ac and H3K56Ac (PubMed:19625767, PubMed:21362626). Modulates acetylation of histone H3 in telomeric chromatin during the S-phase of the cell cycle (PubMed:19625767). May also be required for the association of WRN with telomeres during S-phase and for normal telomere maintenance (PubMed:18337721). Deacetylates histone H3K9Ac at NF-kappa-B target promoters and may down-regulate the expression of a subset of NF-kappa- B target genes (PubMed:21362626). Deacetylation of nucleosomes interferes with RELA binding to target DNA



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.

SIRT6 Antibody (C-term) - Background

SIRT6 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.

SIRT6 Antibody (C-term) - References

Ota, T., et al., Nat. Genet. 36(1):40-45 (2004).
Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).
Frye, R.A., Biochem. Biophys. Res. Commun. 273(2):793-798 (2000).

(PubMed:19135889). Acts as a corepressor of the transcription factor Hif1a to control the expression of multiple glycolytic genes to regulate glucose homeostasis (By similarity). Required for normal IGF1 serum levels and normal glucose homeostasis (By similarity). Regulates the production of TNF protein (By similarity). Has a role in the regulation of life span (By similarity).

Cellular Location
Nucleus, nucleoplasm. Note=Predominantly nuclear. Associated with telomeric heterochromatin regions

SIRT6 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 Cytomety
- Cell Culture

SIRT6 Antibody (C-term) - Citations

- SIRT7 is a histone desuccinylase that functionally links to chromatin compaction and genome stability.
- Cyclic AMP Mimics the Anti-ageing Effects of Calorie Restriction by Up-Regulating Sirtuin.
- Sirtuin-3 (SIRT3), a novel potential therapeutic target for oral cancer.
- Direct evidence of sirtuin downregulation in the liver of non-alcoholic fatty liver disease patients.