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SIRT6 Antibody (C-term) Blocking Peptide

Synthetic peptide

Catalog # BP6245a

Specification

SIRT6 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q8N6T7

SIRT6 Antibody (C-term) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP6245a was selected from the C-term region of human SIRT6 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SIRT6 Antibody (C-term) Blocking Peptide - Protein Information

Name SIRT6

SIRT6 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - 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).

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 (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) Blocking Peptide - Protocols

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

- Blocking Peptides