产品货号: APRab17913



#### 产品概述 (Summary)

产品名称 (Production Name) SIRT1 Rabbit Polyclonal Antibody

描述 (Description) Rabbit polyclonal Antibody

宿主 (Host) Rabbit

**应用 (Application)** WB,IHC,ICC/IF,ELISA

种属反应性 (Reactivity) Human, Mouse

### 产品性能 (Performance)

偶联物 (Conjugation)Unconjugated修饰 (Modification)Unmodified

同种型 (Isotype) IgG

克隆 (Clonality) Polyclonal 形式 (Form) Liquid

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid 存放说明 (Storage)

freeze/thaw cycles.

Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% 储存溶液 (Buffer)

New type preservative N.

纯化方式 (Purification) Affinity purification

# 免疫原信息 (Immunogen)

基因名 (Gene Name) SIRT1

SIRT1; SIR2L1; NAD-dependent protein deacetylase sirtuin-1; hSIRT1; 别名 (Alternative Names)

Regulatory protein SIR2 homolog 1; SIR2-like protein 1; hSIR2

基因 ID (Gene ID) 23411.0

Q96EB6.The antiserum was produced against synthesized peptide derived 蛋白ID (SwissProt ID)

from human SirT1. AA range:13-62

#### 产品应用 (Application)

稀释比 (Dilution Ratio) WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000

**蛋白分子量 (Molecular Weight)** 85-110kDa

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#### 研究背景 (Background)

This gene encodes 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. The protein encoded by this gene is included in class I of the sirtuin family. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2008], catalytic activity:NAD(+) + an acetylprotein = nicotinamide + O-acetyl-ADP-ribose + a protein.,cofactor:Binds 1 zinc ion per subunit.,enzyme regulation:Inhibited by nicotinamide. Activated by resveratrol (3,5,4'-trihydroxy-trans-stilbene), butein (3,4,2',4'tetrahydroxychalcone), piceatannol (3,5,3',4'-tetrahydroxy-trans-stilbene), Isoliquiritigenin (4,2',4'-trihydroxychalcone), fisetin (3,7,3',4'-tetrahydroxyflavone) and quercetin (3,5,7,3',4'-pentahydroxyflavone). RPS19BP1/AROS acts as a positive regulator of deacetylation activity., function: NAD-dependent deacetylase, which regulates processes such as apoptosis and muscle differentiation by deacetylating key proteins. Deacetylates 'Lys-382' of p53/TP53 and impairs its ability to induce proapoptotic program and modulate cell senescence. Deacetylates TAF1B and thereby represses rDNA transcription by the RNA polymerase I. Involved in HES1- and HEY2-mediated transcriptional repression. Inhibits skeletal muscle differentiation by deacetylating PCAF and MYOD1. May serve as a sensor of the cytosolic ratio of NAD(+)/NADH, which is essential in skeletal muscle cell differentiation. Despite some ability to deacetylate histones in vitro, such activity is either weak or inexistent in vivo. In case of HIV-1 infection, interacts with and deacetylates the viral Tat protein, miscellaneous: Red wine, which contains resveratrol, may participate in activation of sirtuin proteins, and may therefore participate in an extended lifespan as it has been observed in yeast., similarity: Belongs to the sirtuin family, similarity: Contains 1 deacetylase sirtuintype domain, subcellular location: Recruited to the nuclear bodies via its interaction with PML, subunit: Interacts with TAF1B. Found in a complex with PCAF and MYOD1 (By similarity). Interacts with MLLT7/FOXO4, HES1, HEY2, p53/TP53 and PML. Interacts with RPS19BP1/AROS., tissue specificity: Widely expressed.,

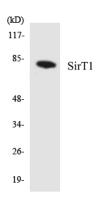
研究领域(Research Area)

Protein\_Acetylation

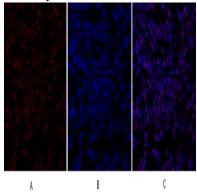
图片 (Image Data)

产品货号: APRab17913

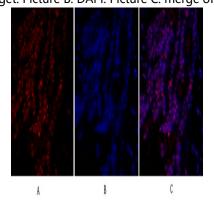




Western blot analysis of the lysates from COLO205 cells using SirT1 antibody.



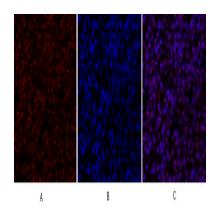
Immunofluorescence analysis of rat-lung tissue. 1,SIRT1 Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



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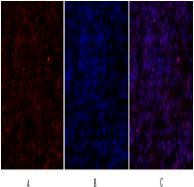
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Immunofluorescence analysis of rat-spleen tissue. 1,SIRT1 Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min.





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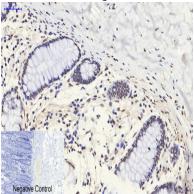
Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,SIRT1 Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.

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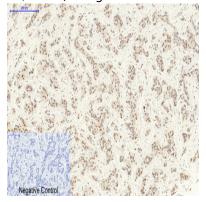




Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1,SIRT1 Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Human-colon tissue. 1,SIRT1 Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,SIRT1 Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.

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## 注意事项 (Note)

For research use only.