



# SIRT1 (phospho-Ser549) rabbit pAb

<b>Catalog No</b>	YP-Ab-03654
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse
<b>Applications</b>	WB;ELISA;IHC
<b>Gene Name</b>	SIRT1 SIR2L1
<b>Protein Name</b>	SIRT1 (phospho-Ser549)
<b>Immunogen</b>	Synthesized peptide derived from human SIRT1 (phospho-Ser549)
<b>Specificity</b>	This antibody detects endogenous levels of Human,Mouse SIRT1 (phospho-Ser549)
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
<b>Dilution</b>	WB 1:500-2000;IHC-p 1:50-300; ELISA 2000-20000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	NAD-dependent protein deacetylase sirtuin-1 (hSIRT1;EC 3.5.1.-;Regulatory protein SIR2 homolog 1;SIR2-like protein 1;hSIR2) [Cleaved into: SirtT1 75 kDa fragment (75SirT1)]
<b>Observed Band</b>	78kD
<b>Cell Pathway</b>	Nucleus, PML body . Cytoplasm . Nucleus . Recruited to the nuclear bodies via its interaction with PML (PubMed:12006491). Colocalized with APEX1 in the nucleus (PubMed:19934257). May be found in nucleolus, nuclear euchromatin, heterochromatin and inner membrane (PubMed:15469825). Shuttles between nucleus and cytoplasm (By similarity). Colocalizes in the nucleus with XBP1 isoform 2 (PubMed:20955178). .; [SirtT1 75 kDa fragment]: Cytoplasm . Mitochondrion .
<b>Tissue Specificity</b>	Widely expressed.
<b>Function</b>	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

#### 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],

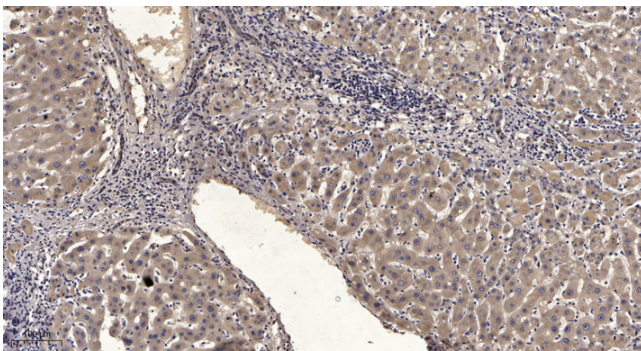
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).