

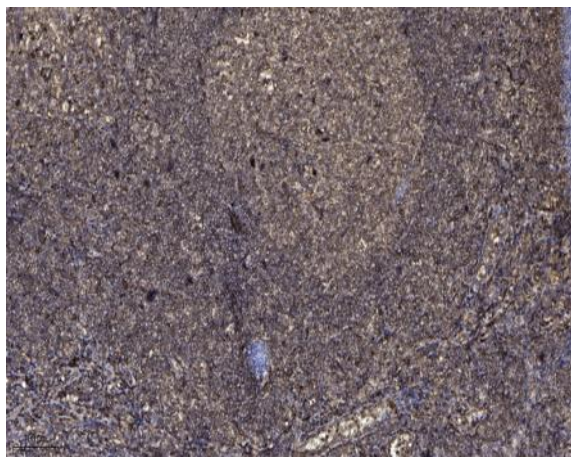
**SIRT1 (phospho Ser47) Polyclonal Antibody**

<b>Catalog No :</b>	YP0488
<b>Reactivity :</b>	Human;Mouse
<b>Applications :</b>	WB;ELISA;IHC
<b>Target :</b>	SIRT1
<b>Fields :</b>	>>Nicotinate and nicotinamide metabolism;>>Metabolic pathways;>>FoxO signaling pathway;>>AMPK signaling pathway;>>Longevity regulating pathway;>>Longevity regulating pathway - multiple species;>>Cellular senescence;>>Glucagon signaling pathway;>>Alcoholic liver disease;>>Amphetamine addiction;>>MicroRNAs in cancer
<b>Gene Name :</b>	SIRT1
<b>Protein Name :</b>	NAD-dependent protein deacetylase sirtuin-1
<b>Human Gene Id :</b>	23411
<b>Human Swiss Prot No :</b>	Q96EB6
<b>Mouse Gene Id :</b>	93759
<b>Mouse Swiss Prot No :</b>	Q923E4
<b>Immunogen :</b>	Synthesized phospho-peptide around the phosphorylation site of human SIRT1 (phospho Ser47)
<b>Specificity :</b>	Phospho-SIRT1 (S47) Polyclonal Antibody detects endogenous levels of SIRT1 protein only when phosphorylated at S47.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500-2000;IHC 1:50-300; ELISA 2000-20000

<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	85-110kD
<b>Cell Pathway :</b>	Protein_Acetylation
<b>Background :</b>	<p>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],</p>
<b>Function :</b>	<p>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</p>
<b>Subcellular Location :</b>	<p>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 .</p>
<b>Expression :</b>	Widely expressed.
<b>Sort :</b>	16344
	2314L

<b>No2 :</b>	<u>1</u>
<b>Host :</b>	<u>Rabbit</u>
<b>Modifications :</b>	<u>Phospho</u>

## Products Images



Immunohistochemical analysis of paraffin-embedded human tonsil. 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).