



SIRT1 (GlcNAc D548) mouse mAb

Catalog No	YP-mAb-03653
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB
Gene Name	SIRT1 SIR2L1
Protein Name	SIRT1 (GlcNAc D548)
Immunogen	Synthesized peptide derived from human SIRT1 (GlcNAc D548)
Specificity	This antibody detects endogenous levels of Human,Mouse SIRT1 (GlcNAc D548)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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)]
Observed Band	78kD
Cell Pathway	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 .
Tissue Specificity	Widely expressed.
Function	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.

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