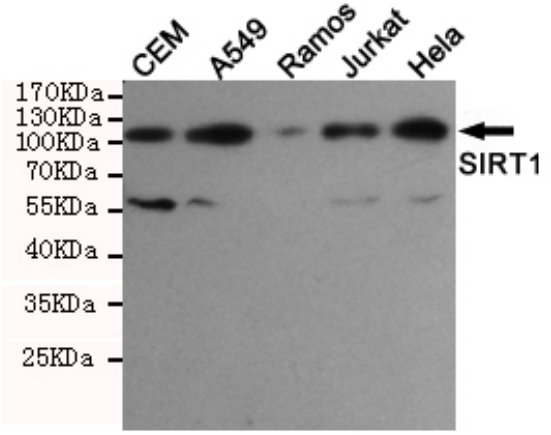
SIRT1 mouse mAb

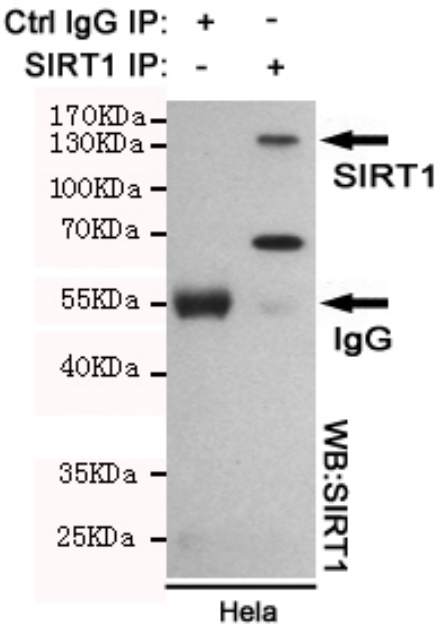
Catalog No	YP-Ab-03473
Isotype	IgG
Reactivity	Human
Applications	WB;IP
Gene Name	sirt1
Protein Name	
Immunogen	Purified recombinant human SIRT1 protein fragments expressed in E.coli.
Specificity	This antibody detects endogenous levels of SIRT1 and does not cross-react with related proteins.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	wb dilution 1:1000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	75SirT1;BA57G10.4;BA57G10.4;hSIR2;hSIRT1;HST2, S. cerevisiae, homolog of;NAD dependent deacetylase SIRT1;NAD dependent deacetylase sirtuin 1;NAD dependent protein deacetylase sirtuin 1;OTTHUMP00000198111;OTTHUMP00000198112;Regulatory protein SIR2 homolog 1;SIR1_HUMAN;SIR2 like 1;SIR2 like protein 1;SIR2, S.cerevisiae, homolog-like 1;SIR2-like protein 1;SIR2ALPHA;SIR2ALPHA;SIR2alpha protein;SIR2alpha protein;SIR2L1;SIRT 1;Sirt1;SIRT1 Sir2 like proteins (siruitins) type 1;SIRT1: sirtuin (silent mating type information regulation 2 homolog) 1 (S. cerevisiae);SIRT1: sirtuin (silent mating type information regulation 2 homolog) 1 (S. cerevisiae);SirtT1 75 kDa fragment;sirtuin (silent mating type information regulation 2 homolog) 1 (S. cerevisiae);Sirtuin 1; sirtuin;Sirtuin type 1;Sirtuin type 1.
Observed Band	85-110kD
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.

Products Images



Western blot detection of SIRT1 in Hela,Jurkat,Ramos,A549 and CEM cell lysates using SIRT1 mouse mAb (1:1000 diluted).Predicted band size:120KDa.Observed band size:120KDa.



Immunoprecipitation analysis of Hela cell lysates using SIRT1 mouse mAb.