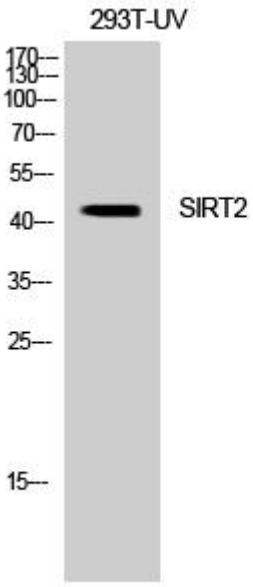
SIRT2 Monoclonal Antibody

Catalog No	BYmab-04213
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	SIRT2
Protein Name	NAD-dependent protein deacetylase sirtuin-2
Immunogen	The antiserum was produced against synthesized peptide derived from human SIRT2. AA range:321-370
Specificity	SIRT2 Monoclonal Antibody detects endogenous levels of SIRT2 protein.
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 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	SIRT2; SIR2L; SIR2L2; NAD-dependent protein deacetylase sirtuin-2; Regulatory protein SIR2 homolog 2; SIR2-like protein 2
Observed Band	43kD
Cell Pathway	Nucleus . Cytoplasm, perinuclear region . Cytoplasm . Cytoplasm, cytoskeleton . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole . Cytoplasm, cytoskeleton, spindle . Midbody . Chromosome . Perikaryon . Cell projection . Cell projection, growth cone . Myelin membrane . Localizes in the cytoplasm during most of the cell cycle except in the G2/M transition and during mitosis, where it is localized in association with chromatin and induces deacetylation of histone at 'Lys-16' (H4K16ac) (PubMed:17726514, PubMed:23468428). Colocalizes with KMT5A at mitotic foci (PubMed:23468428). Colocalizes with CDK1 at centrosome during prophase and splindle fibers during metaphase (PubMed:17488717). Colocalizes w
Tissue Specificity	Isoform 1 is expressed in heart, liver and skeletal muscle, weakly expressed in the cortex. Isoform 2 is strongly expressed in the cortex, weakly expressed in heart and liver. Weakly expressed in several malignancies including breast, liver, brain,

	kidney and prostate cancers compared to normal tissues. Weakly expressed in glioma cell lines compared to normal brain tissues (at protein level). Widely expressed. Highly expressed in heart, brain and skeletal muscle, while it is weakly expressed in placenta and lung. Down-regulated in many gliomas suggesting that it may act as a tumor suppressor gene in human gliomas possibly through the regulation of microtubule network.
Function	catalytic activity:NAD(+) + an acetylprotein = nicotinamide + O-acetyl-ADP-ribose + a protein.,cofactor:Binds 1 zinc ion per subunit.,developmental stage:Peaks during mitosis. After mitosis, it is probably degraded by the 26S proteasome.,enzyme regulation:Inhibited by Sirtinol, A3 and M15 small molecules. Inhibited by nicotinamide.,function:NAD-dependent deacetylase, which deacetylates the 'Lys-40' of alpha-tubulin. Involved in the control of mitotic exit in the cell cycle, probably via its role in the regulation of cytoskeleton. Despite some ability to deacetylate histones in vitro, it is unlikely in vivo.,PTM:Phosphorylated at the G2/M transition of the cell cycle.,similarity:Belongs to the sirtuin family.,similarity:Contains 1 deacetylase sirtuin-type domain.,subcellular location:Colocalizes with microtubules.,subunit:Interacts with HDAC6, suggesting that these proteins belong to a la
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. Several transcript variants are resulted from alternative splicing of this gene. [provided by RefSeq, Jul 2010],
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 analysis of various cells using SIRT2 Monoclonal Antibody