

## SIRT1 Mouse mAb

CatalogNo: YM1416

Orthogonal Validated Comparable Abs 

### Key Features

#### Host Species

- Mouse

#### Reactivity

- Human

#### Applications

- WB,IP

#### MW

- 85-110kD (Observed)

### Storage

**Storage\*** -15°C to -25°C/1 year(Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

### Recommended Dilution Ratios

WB 1:1000

### Basic Information

**Clonality** Monoclonal

**Clone Number** 12A9

### Immunogen Information

**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.

---

## | Target Information

**Gene name** sirt1

**Protein Name**

Organism	Gene ID	UniProt ID
Human	<a href="#">23411</a> ;	<a href="#">Q96EB6</a> ;
Mouse	<a href="#">93759</a> ;	<a href="#">Q923E4</a> ;

**Cellular Localization**

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 .

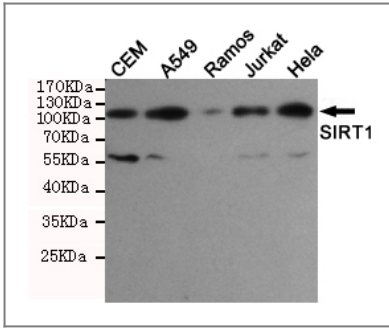
**Tissue specificity** Widely expressed.

**Function**

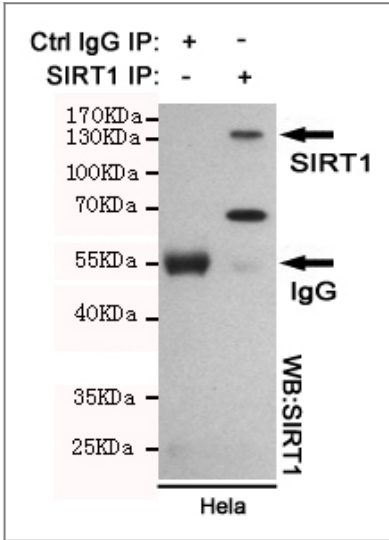
Catalytic activity:NAD(+) + an acetylprotein = nicotinamide + O-acetyl-ADP-ribose + a protein.,cofactor:Binds 1 zinc ion per subunit.,enzyme regulation:Inhibited by nicotinamide. Activated by resveratrol (3,5,4'-trihydroxy-trans-stilbene), butein (3,4,2',4'-tetrahydroxychalcone), piceatannol (3,5,3',4'-tetrahydroxy-trans-stilbene), 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- and HEY2-mediated transcriptional repression. Inhibits skeletal muscle differentiation by deacetylating PCAF and MYOD1. May serve as a sensor of the cytosolic ratio of NAD(+)/NADH, which is essential in skeletal muscle cell differentiation. Despite some ability to deacetylate histones in vitro, such activity is either weak or inexistent in vivo. In case of HIV-1 infection, interacts with and deacetylates the viral Tat protein.,miscellaneous:Red wine, which contains resveratrol, may participate in activation of sirtuin proteins, and may therefore participate in an extended lifespan as it has been observed in yeast.,similarity:Belongs to the sirtuin family.,similarity:Contains 1 deacetylase sirtuin-type domain.,subcellular location:Recruited to the nuclear bodies via its interaction with PML.,subunit:Interacts with TAF1B. Found in a complex with PCAF and MYOD1 (By similarity). Interacts with MLLT7/FOXO4, HES1, HEY2, p53/TP53 and PML. Interacts with RPS19BP1/AROS.,tissue specificity:Widely expressed.,

---

## | Validation Data



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.

## Contact information

Orders: [order@immunoway.com](mailto:order@immunoway.com)  
 Support: [tech@immunoway.com](mailto:tech@immunoway.com)  
 Telephone: 877-594-3616 (Toll Free), 408-747-0185  
 Website: <http://www.immunoway.com>  
 Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information:  
**SIRT1 Mouse mAb**

For Research Use Only. Not for Use in Diagnostic Procedures.

[Antibody](#) | [ELISA Kits](#) | [Protein](#) | [Reagents](#)