Mouse Monoclonal Antibody SIRT1 conjugated to Sepharose Beads

CatalogNo: ANT8094-S

Size 200ul

Storage Store at 4 °C for frequent use

Description

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays.

SIRT1 (ANT0058R) Rabbit mAb

Formulation: 50% slurry in PBS pH 7.2 with 0.01mg NaN3a3 preservative.

Host Species	Reactivity	Applications
• Rabbit	• Human,Rat,	• WB,IHC,IF,IP,ELISA

MW	Isotype
• 81kD (Calculated) 130kD (Observed)	• IgG,Kappa

Recommended Dilution Ratios

IP

Basic Information

Clonality	Monoclonal
Clone Number	ANT0058R

Immunogen Information Specificity

Endogenous

Gene name SIRT1

Protein Name NAD-dependent protein deacetylase sirtuin-1

Organism	Gene ID	UniProt ID
Human	23411;	Q96EB6;
Mouse	93759;	Q923E4;

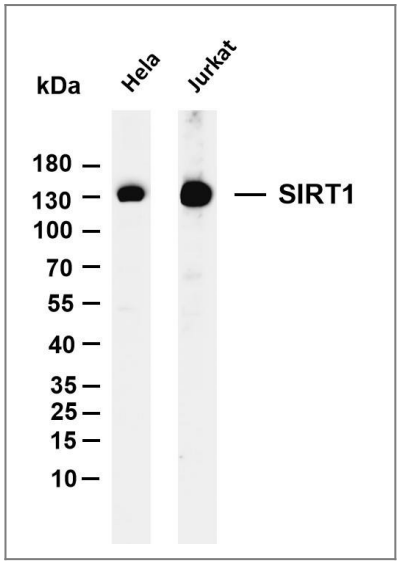
Cellular Localization Nuclear

Tissue specificity Widely expressed.

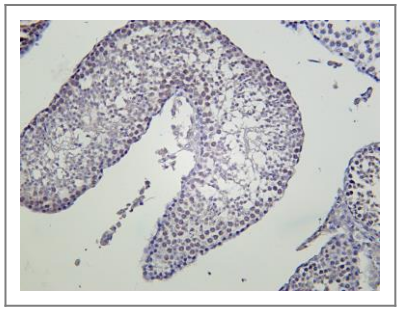
Function Catalytic activity:NAD(+) + an acetylprotein = nicotinamide + O-acetyl-ADP-ribose + a protein.,cofactor:Binds 1 zinc ion per subunit.,enzyme regulation:Inhibited by nicotinamide. Activated by resveratrol (3,5,4'-trihydroxy-trans-stilbene), butein (3,4,2',4'-tetrahydroxychalcone), piceatannol (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

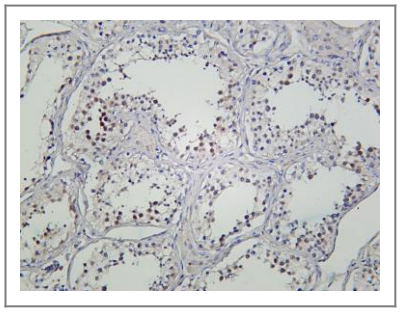
Data



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-SIRT1 (ANT0058R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: Jurkat Predicted band size: 81kDa Observed band size: 130kDa



Mouse testis was stained with Anti-SIRT1 (ANT0058R) rabbit antibody



Human testis was stained with Anti-SIRT1 (ANT0058R) rabbit antibody