

SIRT1 (PT0158R) PT™ Rabbit mAb

CatalogNo: YM8094 **Recombinant** 

Key Features

Host Species

- Rabbit

Reactivity

- Human,Rat,

Applications

- WB,IHC,IF,IP,ELISA

MW

- 81kD (Calculated)
130kD (Observed)

Isotype

- IgG,Kappa

Recommended Dilution Ratios

IHC 1:100-200

WB 1:1000-5000

IF 1:200-1000

ELISA 1:5000-20000

IP 1:50-200

Storage

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

Formulation PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

Basic Information

Clonality Monoclonal

Clone Number PT0158R

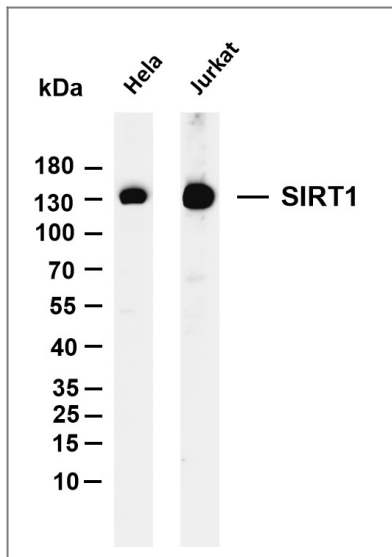
Immunogen Information

Specificity Endogenous

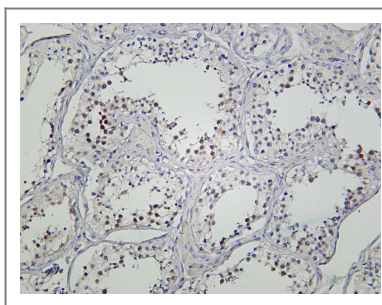
| Target Information

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	<p>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.,</p>		

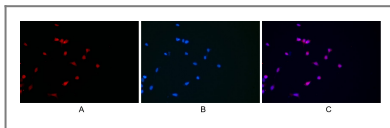
| Validation Data



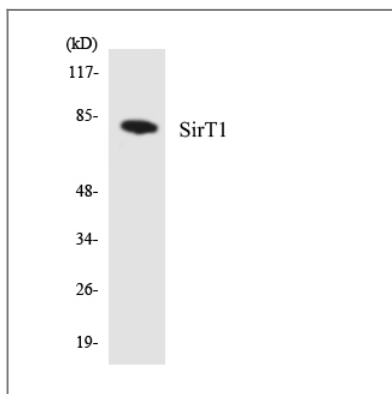
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-SIRT1 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: Jurkat Predicted band size: 81kDa Observed band size: 130kDa



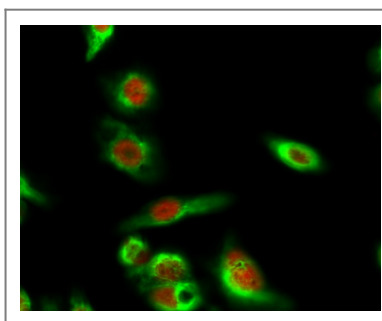
Human testis was stained with Anti-SIRT1 rabbit antibody



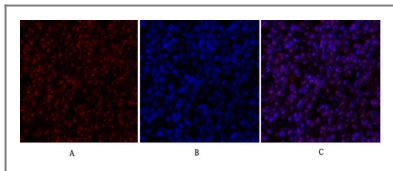
Immunofluorescence analysis of HEK293. Picture A: SIRT1 antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B



Western blot analysis of the lysates from COLO205 cells using SirT1 antibody.



Immunofluorescence analysis of HeLa cell. 1, SIRT1 Antibody (red) was diluted at 1:200 (4° overnight). LC3B Antibody (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).



Immunofluorescence analysis of rat-spleen tissue. 1, SIRT1 Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

Contact information

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Please scan the QR code to access additional product information:
SIRT1 (PT0158R)
PT™ Rabbit mAb

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