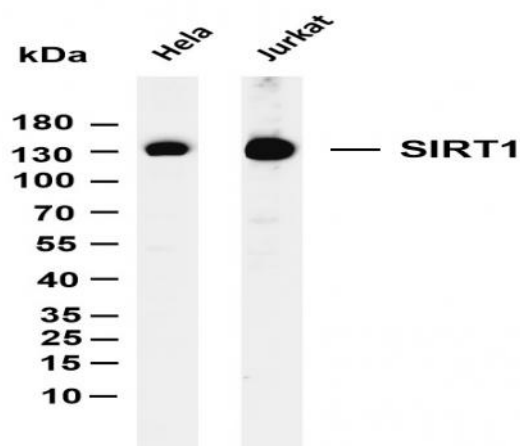


SIRT1 (PT0158R) PT® Rabbit mAb

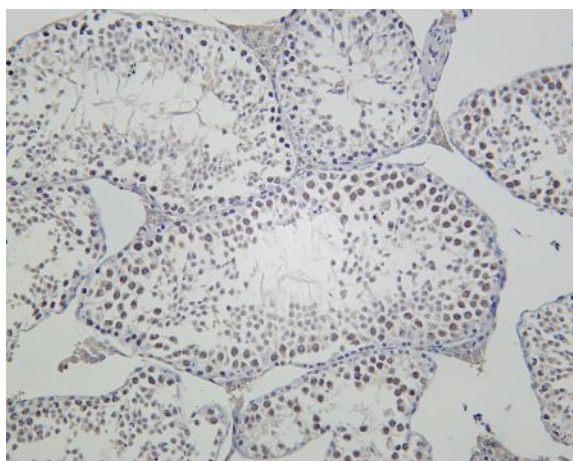
Catalog No :	YM8094
Reactivity :	Human; Rat;
Applications :	WB;IHC;IF;IP;ELISA
Target :	SIRT1
Fields :	>>Nicotinate and nicotinamide metabolism;>>Metabolic pathways;>>FoxO signaling pathway;>>AMPK signaling pathway;>>Longevity regulating pathway;>>Longevity regulating pathway - multiple species;>>Cellular senescence;>>Glucagon signaling pathway;>>Alcoholic liver disease;>>Amphetamine addiction;>>MicroRNAs in cancer
Gene Name :	SIRT1
Protein Name :	NAD-dependent protein deacetylase sirtuin-1
Human Gene Id :	23411
Human Swiss Prot No :	Q96EB6
Mouse Gene Id :	93759
Mouse Swiss Prot No :	Q923E4
Specificity :	endogenous
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Monoclonal, rabbit, IgG, Kappa
Dilution :	IHC 1:100-200,WB 1:1000-5000,IF 1:200-1000,ELISA 1:5000-20000,IP 1:50-200
Purification :	Protein A
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight :	81kD
Observed Band :	130kD
Cell Pathway :	Protein_Acetylation
Background :	<p>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],</p>
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</p>
Subcellular Location :	Nuclear
Expression :	Widely expressed.

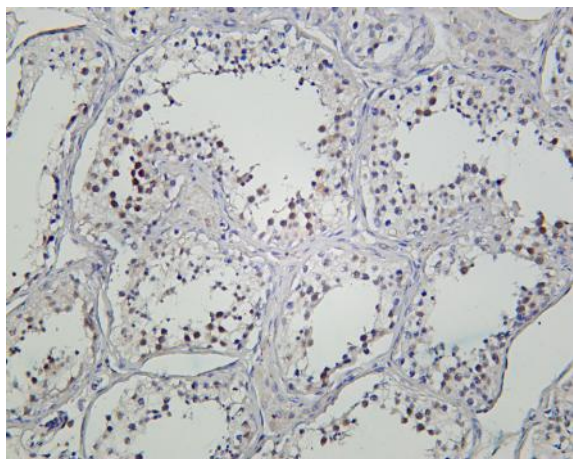
Products Images



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-SIRT1 (PT0158R) 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



Mouse testis was stained with Anti-SIRT1 (PT0158R) rabbit antibody



Human testis was stained with Anti-SIRT1 (PT0158R) rabbit antibody