

SIRT1 Polyclonal Antibody

Catalog number: 13161-1-AP

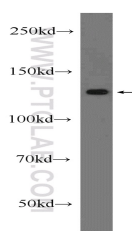
Size: 45 µg/150 µl

Source: Rabbit

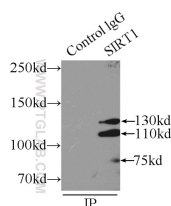
Isotype: IgG

Synonyms:

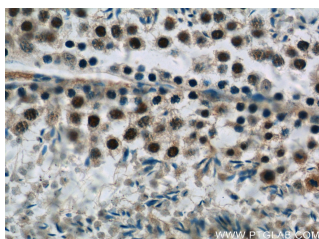
SIRT1; hSIR2, hSIRT1, SIR2 like protein 1, SIR2L1, SIRT1



HeLa cells were subjected to SDS PAGE followed by western blot with 13161-1-AP (SIRT1 Antibody) at dilution of 1:800



IP Result of anti-SIRT1 (IP:13161-1-AP, 4µg; Detection:13161-1-AP 1:500) with mouse testis tissue lysate 8000µg.



Immunohistochemistry of paraffin-embedded mouse testis tissue slide using 13161-1-AP (SIRT1 Antibody) at dilution of 1:50 (under 40x lens)

Background

SIRT1, also named as SIR2L1, contains a deacetylase sirtuin-type domain and belongs to the sirtuin family. The post-translation modified SIRT1 is a 110 kDa protein, which contains one deacetylase sirtuin-type domain. The 75 kDa SirT1 fragment was detected to lack the carboxy-terminus (PMID:21305533). SIRT1 may be found in nucleolus, nuclear euchromatin, heterochromatin and inner membrane. It can shuttle between nucleus and cytoplasm. SIRT1 regulates processes such as apoptosis and muscle differentiation by deacetylating key proteins. SIRT1 in particular initiates several signaling events relevant to cardioprotection, including: activation of endothelial nitric oxide synthase, insulin receptor signaling, and autophagy. In addition SIRT1 activation elicits resistance to oxidative stress via regulation of transcription factors and co-activators such as FOXO, Hif-2α, and NF-κB. SIRT1 regulates the p53-dependent DNA damage response pathway by binding to and deacetylating p53, specifically at Lysine 382. This antibody is a rabbit polyclonal antibody raised against residues near the N terminus of human SIRT1.

Applications

Tested applications:	ELISA, IP, IHC, WB
Cited applications:	IF, IHC, IP, WB
Species specificity:	Human, Mouse, Rat; other species not tested.
Cited species:	Human, mouse, rat
Calculated SIRT1 MW:	747aa, 82 kDa
Observed SIRT1 MW:	110-130 kDa, 80-85 kDa
Positive WB detected in	HeLa cells, DU 145 cells, HEK-293 cells, Jurkat cells, K-562 cells, MCF7 cells, mouse testis tissue, PC-3 cells
Positive IP detected in	Mouse testis tissue
Positive IHC detected in	Mouse testis tissue, human colon cancer tissue, human lung cancer tissue
Recommended dilution:	WB: 1:200-1:2000 IP: 1:200-1:2000 IHC: 1:20-1:200

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

Immunogen information

Immunogen:	Ag3808
GenBank accession number:	BC012499
Gene ID (NCBI):	23411
Full name:	Sirtuin (silent mating type information regulation 2 homolog) 1 (S. cerevisiae)

Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3. Store at -20°C.