

For Research Use Only

SIRT3 Polyclonal antibody

Catalog Number: 10099-1-AP

Featured Product

145 Publications



Basic Information

Catalog Number:

10099-1-AP

Size:

150ul, Concentration: 550 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0148

GenBank Accession Number:

BC001042

GeneID (NCBI):

23410

UNIPROT ID:

Q9NTG7

Full Name:

sirtuin (silent mating type information regulation 2 homolog) 3 (S. cerevisiae)

Calculated MW:

44 kDa

Observed MW:

28 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:1000-1:8000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:200-1:800

Applications

Tested Applications:

WB, IHC, IP, ELISA

Cited Applications:

WB, IHC, IF, IP, CoIP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, bovine, goat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HT-29 cells, mouse heart tissue, human spleen tissue, mouse kidney tissue, mouse skeletal muscle tissue, rat heart tissue, HEK-293 cells, HepG2 cells, mouse liver tissue, rat liver tissue

IP: HT-29 cells,

IHC: human stomach tissue, human intrahepatic cholangiocarcinoma tissue

Background Information

Sirtuins are NAD⁺-dependent histone/protein deacetylases (HDAC) and SIRT3 is the only sirtuin whose increased expression has been shown to correlate with an extended life span in humans. It is localized in the mitochondrial matrix, where it regulates the acetylation levels of metabolic enzymes, including acetyl coenzyme A synthetase 2. SIRT3 is stress-responsive and its increased expression protects myocytes from genotoxic and oxidative stress-mediated cell death. full-length hSIRT3 (44 kDa) is an inert protein and that it is activated inside the mitochondria following deletion of 142 amino acids of the N-terminal segment. This processed form of SIRT3 is approximately 28 kDa and possesses deacetylase activity. The full SIRT3 is a 44 kDa protein and is processed by mitochondrial processing peptidase (MPP) to give a 28 kDa product.

Notable Publications

Author	Pubmed ID	Journal	Application
Gagan Chhabra	34597611	J Invest Dermatol	WB
Xinhui Liu	34603081	Front Physiol	WB
Jia Wang	36086852	Phytother Res	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

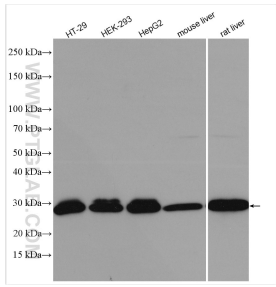
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

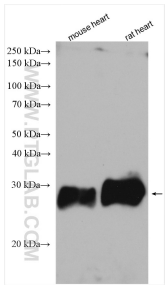
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

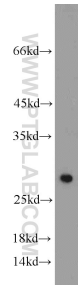
Selected Validation Data



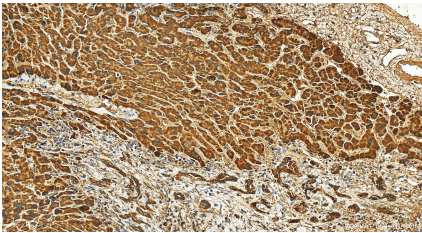
Various lysates were subjected to SDS PAGE followed by western blot with 10099-1-AP (SIRT3 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



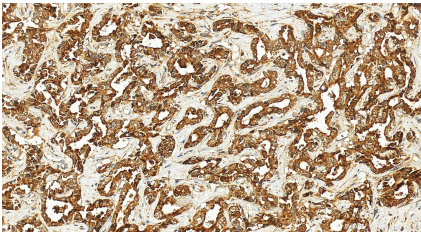
Various lysates were subjected to SDS PAGE followed by western blot with 10099-1-AP (SIRT3 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



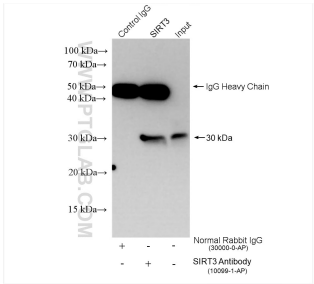
human spleen tissue were subjected to SDS PAGE followed by western blot with 10099-1-AP (SIRT3 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



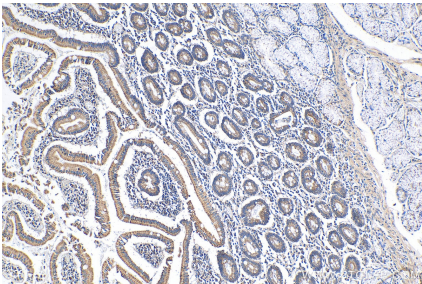
Immunohistochemical analysis of paraffin-embedded human intrahepatic cholangiocarcinoma tissue slide using 10099-1-AP (SIRT3 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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IP result of anti-SIRT3 (IP:10099-1-AP, 4ug; Detection:10099-1-AP 1:3000) with HT-29 cells lysate 1080 ug.



Immunohistochemical analysis of paraffin-embedded human stomach tissue slide using 10099-1-AP (SIRT3 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).