

For Research Use Only

# SIRT1 Monoclonal antibody, PBS Only



Catalog Number: 60303-1-PBS

Featured Product

## Basic Information

Catalog Number:

60303-1-PBS

Size:

1 mg/ml

Source:

Mouse

Isotype:

IgG2b

Immunogen Catalog Number:

AG17677

GenBank Accession Number:

BC012499

GeneID (NCBI):

23411

UNIPROT ID:

Q96EB6

Full Name:

sirtuin (silent mating type  
information regulation 2 homolog) 1  
(S. cerevisiae)

Calculated MW:

747 aa, 82 kDa

Observed MW:

110-130 kDa

Purification Method:

Protein A purification

CloneNo.:

7F6G6

## Applications

Tested Applications:

WB,IP,Indirect ELISA,IHC,IF

Species Specificity:

human

## Background Information

SIRT1, also named as SIR2L1, contains a deacetylase sirtuin-type domain and belongs to the sirtuin family. The post-translation modified SIRT1 is a 110-130 kDa protein, which contains one deacetylase sirtuin-type domain. The 75-80 kDa SIRT1 fragment was detected to lack the carboxy-terminus (PMID:21305533). SIRT1 exists a 57-61 kDa isoform. 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, INS 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-2a, and NF- $\kappa$ B. SIRT1 regulates the p53-dependent DNA damage response pathway by binding to and deacetylating p53, specifically at Lysine 382.

## Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS Only

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

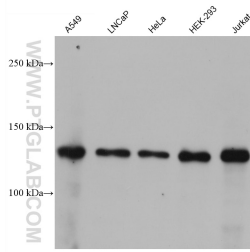
T: 4006900926

E: Proteintech-CN@ptglab.com

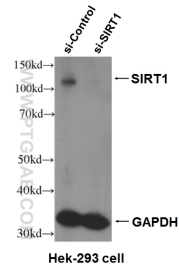
W: ptgcn.com

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

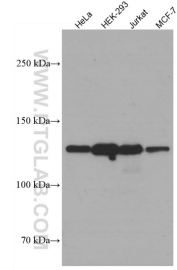
## Selected Validation Data



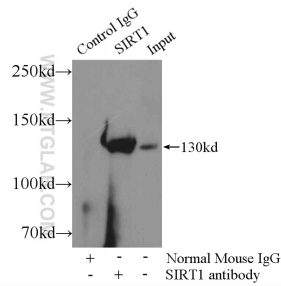
Various lysates were subjected to SDS PAGE followed by western blot with 60303-1-Ig (SIRT1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60303-1-PBS in a different storage buffer formulation.



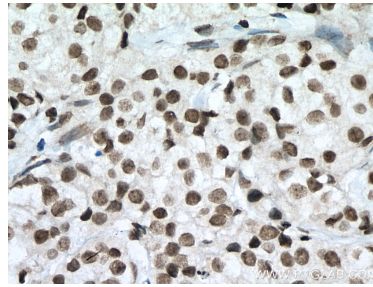
WB result of SIRT1 antibody (60303-1-Ig, 1:500) with si-Control and si-SIRT1 transfected HEK-293 cells. This data was developed using the same antibody clone with 60303-1-PBS in a different storage buffer formulation.



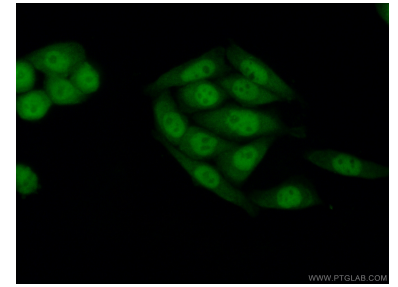
Various lysates were subjected to SDS PAGE followed by western blot with 60303-1-Ig (SIRT1 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60303-1-PBS in a different storage buffer formulation.



IP result of anti-SIRT1 (IP:60303-1-Ig, 5ug; Detection:60303-1-Ig 1:1000) with HeLa cells lysate 2000ug. This data was developed using the same antibody clone with 60303-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 60303-1-Ig (SIRT1 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60303-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (10% Formaldehyde) fixed HeLa cells using 60303-1-Ig(SIRT1 antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 60303-1-PBS in a different storage buffer formulation.