

For Research Use Only

# SIRT4 Monoclonal antibody

Catalog Number: 66543-1-Ig

Featured Product

22 Publications



## Basic Information

<b>Catalog Number:</b> 66543-1-Ig	<b>GenBank Accession Number:</b> BC109319	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 1000 ug/ml by Nanodrop and 301 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 23409	<b>CloneNo.:</b> 1D5A2
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q9Y6E7	<b>Recommended Dilutions:</b> WB 1:20000-1:80000
<b>Isotype:</b> IgG1	<b>Full Name:</b> sirtuin (silent mating type information regulation 2 homolog) 4 (S. cerevisiae)	
<b>Immunogen Catalog Number:</b> AG17347	<b>Calculated MW:</b> 314 aa, 35 kDa	
	<b>Observed MW:</b> 35 kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB : HeLa cells, NCCIT cell, PC-3 cells, L02 cells
<b>Cited Applications:</b> WB, IHC, IF	
<b>Species Specificity:</b> human	
<b>Cited Species:</b> human	

## Background Information

SIRT4, also named as NAD-dependent protein lipoamidase sirtuin-4, mitochondria, is a 314 amino acid protein, which belongs to the sirtuin family. Class II subfamily. SIRT4 is detected in vascular smooth muscle and striated muscle. SIRT4 is detected in insulin-producing beta-cells in pancreas islets of Langerhans. SIRT4 Acts as NAD-dependent protein lipoamidase, ADP-ribosyl transferase and deacetylase. It catalyzes more efficiently removal of lipoyl- and biotinyl- than acetyl-lysine modifications and inhibits the pyruvate dehydrogenase complex (PDH) activity via the enzymatic hydrolysis of the lipoamide cofactor from the E2 component, DLAT, in a phosphorylation-independent manner. SIRT4 expression is down-regulated in a number of cancers, while overexpression reduces cell proliferation, transformation, and tumor development.

## Notable Publications

Author	Pubmed ID	Journal	Application
Leonie Drews	32917661	Dis Model Mech	WB
Ying Cui	33033517	J Cancer	WB
Kalaiselvi Sivalingam	34716387	Sci Rep	WB

## Storage

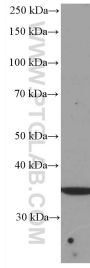
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 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



HeLa cells were subjected to SDS PAGE followed by western blot with 66543-1-Ig (SIRT4 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours.