

For Research Use Only

# SIRT3 Recombinant antibody

Catalog Number: 82210-1-RR



## Basic Information

<b>Catalog Number:</b> 82210-1-RR	<b>GenBank Accession Number:</b> BC001042	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 500 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 23410	<b>CloneNo.:</b> 2P6
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q9NTG7	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:400-1:1600
<b>Isotype:</b> IgG	<b>Full Name:</b> sirtuin (silent mating type information regulation 2 homolog) 3 (S. cerevisiae)	
<b>Immunogen Catalog Number:</b> AG26280	<b>Calculated MW:</b> 44 kDa	
	<b>Observed MW:</b> 28-30 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> human, mouse, rat, pig	<b>WB :</b> HeLa cells, mouse heart tissue, rat heart tissue, HepG2 cells, HT-29 cells, mouse liver tissue, pig liver tissue, rat liver tissue
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	<b>IHC :</b> human prostate cancer tissue,

## Background Information

Sirtuins are NAD<sup>+</sup>-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.

## Storage

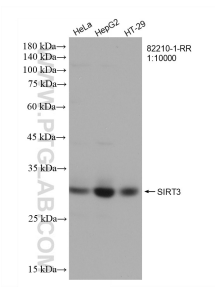
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

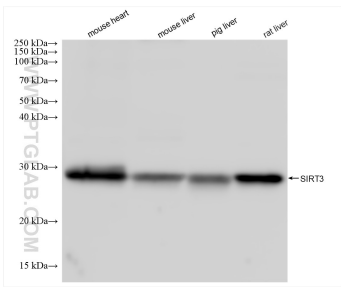
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

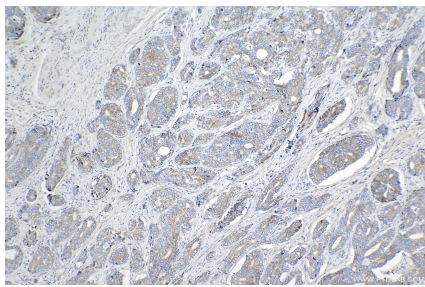
Selected Validation Data



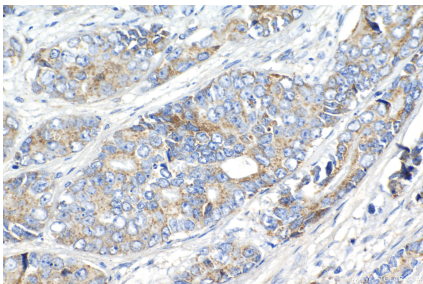
Various lysates were subjected to SDS PAGE followed by western blot with 82210-1-RR (SIRT3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



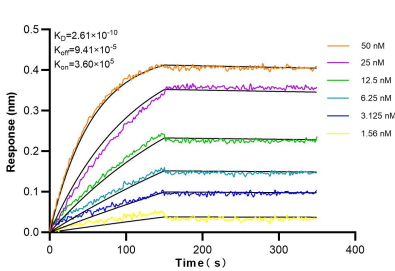
Various lysates were subjected to SDS PAGE followed by western blot with 82210-1-RR (SIRT3 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 82210-1-RR (SIRT3 antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 82210-1-RR (SIRT3 antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 82210-1-RR against Human SIRT3 were performed. The affinity constant is 0.261 nM.