For Research Use Only

## SIRT3 Recombinant antibody, PBS Only

Catalog Number:82210-1-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

2P6

**Basic Information** 

Catalog Number: 82210-1-PBS

Concentration:
1mg/ml
Source:
Rabbit

Immunogen Catalog Number:

immunogen Catatog Number:

AG26280

Isotype:

GenBank Accession Number:

BC001042 GeneID (NCBI): 23410 UNIPROT ID:

Full Name: sirtuin (silent mating type

information regulation 2 homolog) 3

(S. cerevisiae)
Calculated MW:
44 kDa
Observed MW:

28-30 kDa

Q9NTG7

**Applications** 

Tested Applications: WB, IHC, Indirect ELISA Species Specificity: human, mouse, rat, pig

## **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.

Storage

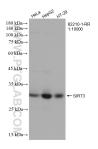
Storage:

Store at -80°C.

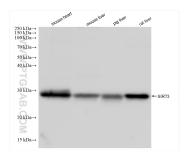
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS only, pH7.3

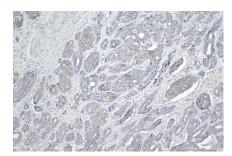
## Selected Validation Data



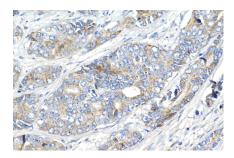
Various lysates were subjected to SDS PAGE followed by western blot with 82210-1-RR (SIRT3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82210-1-PBS in a different storage buffer formulation.



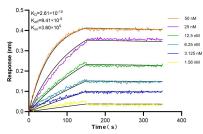
Various lysates were subjected to SDS PAGE followed by western blot with 82210-1-RR (SIRT3 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82210-1-PBS in a different storage buffer formulation.



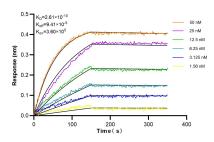
Immunohistochemical analysis of paraffinembedded human prostate cancer tissue slide using 82210-1-RR (SIRT3 antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82210-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded 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). This data was developed using the same antibody clone with 82210-1-PBS in a different storage buffer formulation.



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



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