## For Research Use Only

## SIRT3 Polyclonal antibody

Catalog Number: 29838-1-AP



**Purification Method:** 

WB 1:1000-1:4000 IHC 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

**Basic Information** 

Catalog Number: GenBank Accession Number: 29838-1-AP BC001042 GeneID (NCBI): Size:  $600 \mu g/ml$ 23410 **UNIPROT ID:** Source: Rabbit Q9NTG7

sirtuin (silent mating type

information regulation 2 homolog) 3 Immunogen Catalog Number:

AG31333 Calculated MW: 44 kDa Observed MW:

28-30 kDa

Full Name:

(S. cerevisiae)

**Applications** 

**Tested Applications:** WB, IHC, ELISA Species Specificity: Human

Isotype:

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: HEK-293 cells, HeLa cells, HepG2 cells IHC: human prostate cancer 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 stressmediated 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

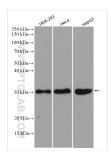
Storage:

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

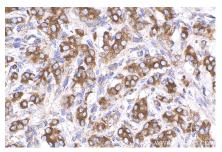
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

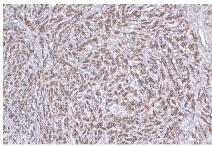
## **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 29838-1-AP (SIRT3 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human prostate cancer tissue slide using 29838-1-AP (SIRT3 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human prostate cancer tissue slide using 29838-1-AP (SIRT3 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).