### For Research Use Only

# SIRT4 Monoclonal antibody

Catalog Number: 66543-1-lg Featured Product 35 Publications



**Basic Information** 

Catalog Number: 66543-1-lg Size:

1000 µg/ml Source: Mouse Isotype:

lgG1

Immunogen Catalog Number:

AG17347

GenBank Accession Number:

Q9Y6E7

sirtuin (silent mating type

(S. cerevisiae)

Calculated MW: 314 aa, 35 kDa Observed MW:

**Applications** 

**Tested Applications:** 

WB. ELISA

**Cited Applications:** WB, IHC, IF

Species Specificity: Human

**Cited Species:** human

BC109319 GeneID (NCBI): 23409 **UNIPROT ID:** 

Full Name:

information regulation 2 homolog) 4

35 kDa

**Positive Controls:** 

WB: HeLa cells, NCCIT cell, PC-3 cells, LO2 cells

**Purification Method:** 

Protein A purification

Recommended Dilutions:

WB 1:20000-1:80000

CloneNo.:

1D5A2

## **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 NADdependent 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 phosphorylationindependent 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

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



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