## For Research Use Only

## SIRT1 Recombinant antibody

Catalog Number:82790-2-RR



**Basic Information** 

Catalog Number: 82790-2-RR

 82790-2-RR
 BC012499

 Size:
 GeneID (NCBI):

 400 μg/ml
 23411

 Source:
 UNIPROT ID:

 Rabbit
 Q96EB6

 Isotype:
 Full Name:

IgG sirtuin (silent mating type

Immunogen Catalog Number: information regulation 2 homolog) 1
AG3808 (S. cerevisiae)

GenBank Accession Number:

Calculated MW: 747 aa, 82 kDa Observed MW: 110-130 kDa

**Applications** 

Tested Applications: WB, ELISA
Species Specificity:

Species Specif

**Positive Controls:** 

WB: HEK-293 cells, HeLa cells, MCF-7 cells, Jurkat

**Purification Method:** 

CloneNo.:

4F14

Protein A purification

Recommended Dilutions:

WB 1:1000-1:8000

cells, K-562 cells

## **Background Information**

SIRT1, also named as SIR2L1, contains a deacetylase sirtuin-type domain and belongs to the sirtuin family. The post-translation modified SIRT1 is a 110-130 kDa protein, which contains one deacetylase sirtuin-type domain. The 75-80 kDa SirT1 fragment was detected to lack the carboxy-terminus (PMID:21305533). SirT1 exists a 57-61 kDa isoform. SIRT1 may be found in nucleolus, nuclear euchromatin, heterochromatin and inner membrane. It can shuttles between nucleus and cytoplasm. SIRT1 regulates processes such as apoptosis and muscle differentiation by deacetylating key proteins. SIRT1 in particular initiates several signaling events relevant to cardioprotection, including: activation of endothelial nitric oxide synthase, INS receptor signaling, and autophagy. In addition SIRT1 activation elicits resistance to oxidative stress via regulation of transcription factors and co-activators such as FOXO, Hif-2a, and NF-kB. SIRT1 regulates the p53-dependent DNA damage response pathway by binding to and deacetylating p53, specifically at Lysine 382.

Storage

Storage:

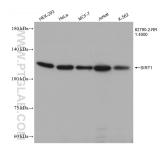
Store at -20°C. Stable for one year after shipment.

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 82790-2-RR (SIRT1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.