IBL Data Sheet

Code No. 18761

Anti-Human
Sir2/SIRT1 Rabbit IgG Affinity Purify

Volume : 100 µg

Introduction : Imai et al. have found that S. cerevisiae Sir2p and its higher eukaryotic orthologs are novel nicotinamide adenine dinucleotide (NAD)-dependent histone/protein deacetylases (1). Sir2 proteins promote longevity in yeast and in C. elegans by silencing rDNA and regulating the insulin/IGF-1 signaling pathway, respectively. The enzymatic activities and functions of Sir2 proteins are highly conserved in evolution.
In 2001, Vaziri, H. et al. have found that mammalian Sir2 negatively regulates the p53 function by physically interacting with and deacetylating the protein (2). This aspect of Sir2 function may connect various cellular damages, such as oxidative stress, to aging and carcinogenesis.

Antigen : Synthetic peptides of the part of C-terminal of human Sir2/SIRT1 (LEDEPDVPERAGG)

Purification : Purified with antigen peptides

Form : Lyophilized product from PBS containing 1 % BSA and 0.05 % NaN_3

How to use : 1.0 mL deionized water will be added to the product, then its concentration comes to 100 µg/mL

Stability : Lyophilized product, 5 years at 2 – 8 ℃
: Solution, 2 years at –20 ℃

Application : This antibody can be stained in formalin fixed paraffin embedded tissues with microwave pre-treatment (10mM Citrate buffer, pH6.0, 10 min). The optimal dilution is about 5 µg/ml, however, the dilution rate should be optimized by each laboratories.

: This antibody can be used for western blotting at about 3µg/mL.

: This antibody can be used for immuno-precipitation at about 3µg/mL.

Specificity : Confirmed by western blotting

References :

1. Imai, S. *et al.* Transcriptional silencing and longevity protein Sir2 is an NAD-dependent histone deacetylase. Nature, 403: 795-800, 2000
2. Vaziri, H. *et al.* hSIR2/SIRT1 functions as an NAD-dependent p53 deacetylase. Cell, 107: 149-159, 2001

For research use only, not for use in diagnostic procedures.

Distributed by:
Immuno-Biological Laboratories, Inc.
8201 Central Ave NE, Suite P
Minneapolis, MN 55432
Toll-Free: 888-523-1246
Email: info@IBL-America.com
Web: www.IBL-America.com

Immuno-Biological
Laboratories Co., Ltd.