

Recombinant Phospho-SIRT1(Ser27) Monoclonal Antibody

catalog number: AN302088L

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

| | |
|---------------------|---|
| Reactivity | Human; |
| Immunogen | phosphorylated human SIRT1(Ser27) peptide |
| Host | Rabbit |
| Isotype | IgG, κ |
| Clone | A812 |
| Purification | Protein A purified |
| Buffer | PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant. |

Applications

| Applications | Recommended Dilution |
|--------------|----------------------|
| WB | 1:500-1:1000 |
| IF | 1:50 |

Preparation & Storage

| | |
|-----------------|---|
| Storage | Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles. |
| Shipping | Ice bag |

Background

SIRT1 is a member of the Silent Information Regulator2 (SIR2) family, which is a highly conserved group of genes that encode nicotinamide adenine dinucleotide (NAD)-dependent protein deacetylases, also known as class III histone deacetylases. The first discovered and best characterized of these genes is *Saccharomyces cerevisiae* SIR2, which is involved in silencing of mating type loci, telomere maintenance, DNA damage response, and cell aging. SirT1, the mammalian ortholog of Sir2, is a nuclear protein implicated in the regulation of many cellular processes, including apoptosis, cellular senescence, endocrine signaling, glucose homeostasis, aging, and longevity. Targets of SirT1 include acetylated p53, p300, Ku70, forkhead (FoxO) transcription factors, PPAR γ , and the PPAR γ coactivator-1 α (PGC-1 α) protein. SirT1 deacetylase activity is inhibited by nicotinamide and activated by resveratrol. In addition, SirT1 activity may be regulated by phosphorylation, as it is phosphorylated at Ser27 and Ser47 in vivo; however, the function of these phosphorylation sites has not yet been determined.

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