

**Active SIRT2, human recombinant protein**  
**NAD-dependent protein deacetylase sirtuin-2, Regulatory protein SIR2 homolog 2, SIR2-like protein 2,**  
**Catalog # PBV11274r**

## Specification

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### Active SIRT2, human recombinant protein - Product info

Primary Accession  
Calculated MW

[Q8IXJ6](#)

**Human SIRT2 is a 60 kDa (2 to 389 aa + NT His Tag) protein kDa**

### Active SIRT2, human recombinant protein - Additional Info

Gene ID **22933**  
Gene Symbol **SIRT2**

#### Other Names

NAD-dependent protein deacetylase sirtuin-2, Regulatory protein SIR2 homolog 2, SIR2-like protein 2, SIR2L, SIR2L2.

Gene Source	<b>Human</b>
Source	<b>E.coli</b>
Assay&Purity	<b>SDS-PAGE; ≥90%</b>
Assay2&Purity2	<b>HPLC;</b>
Recombinant	<b>Yes</b>
Results	<b>≥ 4 mU/mg</b>
<b>Target/Specificity</b>	
SIRT2	

### Application Notes

Centrifuge the vial prior to opening. Reconstitute in sterile dH2O to a concentration of 0.1 – 1 mg/ml and let the lyophilized pellet dissolve completely. This solution can then be diluted into other aqueous buffers and stored at 4°C for 1 week or -20°C for future use. For long term storage, it is recommended to add a carrier protein (0.1% BSA). Avoid multiple freeze/thaw cycles.

### Format

Sirtuin 2 (SIRT2) with a His-tag is supplied as lyophilized powder.

### Storage

-20°C; Human Sirtuin 2 is lyophilized from 50 mM Tris, pH 8.0.

### Active SIRT2, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Active SIRT2, human recombinant protein - Images****Active SIRT2, human recombinant protein - Background**

Sirtuins function as intracellular regulatory proteins. Human Sirtuin 2 is a member of the class III histone deacetylases (HDACs) and has been implicated in many cellular processes that include histone deacetylation, gene silencing, chromosomal stability, and aging. Human SIRT2 is a cytoplasmic protein responsible for the deacetylation of histone H4 and  $\alpha$ -tubulin, a modification important for controlling the cell cycle. Specifically, SIRT2 protein co-localizes with HDAC6 and microtubules and functions as a mitotic checkpoint in preventing chromosomal instability that can lead to hyperploid cells. SIRT2 is found in many tissues, but is specifically enriched in skeletal muscle, the heart, and in oligodendroglia cells in the brain. The enzymatic activity of class III HDACs is nicotinamide adenine dinucleotide (0.1mM NAD<sup>+</sup>) dependent and insensitive to HDAC inhibitor trichostatin A.

**Active SIRT2, human recombinant protein - References**

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De Smet C., et al. J. Neurochem. 81:575-588(2002).  
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