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Product Information

SIRT2, active, His-tagged, human recombinant, expressed in *Sf*9 cells

Catalog Number **SRP5271**
Storage Temperature –70 °C

Synonyms: SIR2L, SIR2L2

Product Description

SIRT2 is a member of the sirtuin family of proteins, which are homologs to the yeast Sir2 protein. The sirtuin family contains a sirtuin core domain and is grouped into four classes with SIRT2 being a member of class I. Inhibition of SIRT2 can lead to neuro-protection in cellular and invertebrate models of Huntington's disease.[1] Huntington's disease is characterized by increased synthesis of sterols in neuronal cells and this process is reversed by SIRT2 inhibition. SIRT2 can deacetylate Lys^{40} of α-tubulin both *in vitro* and *in vivo*.[2] Knockdown of SIRT2 via small interfering RNA results in tubulin hyperacetylation.

Recombinant full length human SIRT2 was expressed by baculovirus in *Sf*9 insect cells using an N-terminal His-tag. The gene accession number is NM_030593. It is supplied in 50 mM sodium phosphate, pH 7.0, 300 mM NaCl, 150 mM imidazole, 0.1 mM PMSF, 0.25 mM DTT, and 25% glycerol.

Molecular mass: ~42 kDa

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at –70 °C is recommended. After opening, aliquot into smaller quantities and store at –70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.
SDS-PAGE Gel of Typical Lot:
≥70% (SDS-PAGE, densitometry)

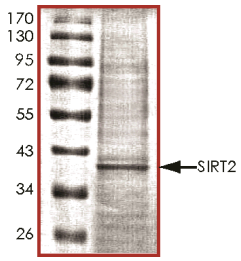

Figure 2.
Specific Activity of Typical Lot:
6,120–10,580 RLU/min/ng

Histone deacetylase (HDAC) activity was determined with a luminescent assay procedure.

References

1. Luthi-Carter, R. et al., SIRT2 inhibition achieves neuroprotection by decreasing sterol biosynthesis. Proc Natl Acad Sci U S A., **107**(17), 7927-32 (2010).
2. North, B.J. et al., The human Sir2 ortholog, SIRT2, is an NAD(+)-dependent tubulin deacetylase. Molec. Cell, **11**, 437-444 (2003).

RC,MAM 12/12-1