

Recombinant SIRT1 (193-741) protein

Catalog No: 31533, 31933

Lot No: 15316001

Expressed In: *E. coli*

Quantity: 100 µg

Concentration: 0.6 µg/µl

Source: Human

Buffer Contents: Recombinant SIRT1 (193-741) protein is supplied at a concentration of 0.6 µg/µl in 25 mM Tris pH 8.0, 150 mM NaCl, 5% glycerol.

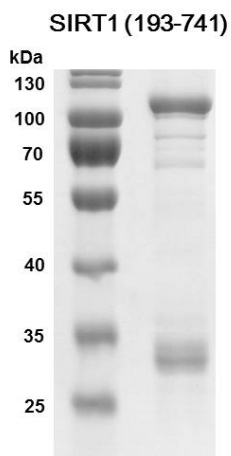
Background: SIRT1 (Sirtuin 1, SIR2L1) is a member of the Sirtuin family of proteins related to the yeast Sir2 protein. Like Sir2 and other Sirtuins, SIRT1 is an NAD⁺-dependent histone and protein deacetylase. SIRT1 catalyzes the removal of acetyl groups from a variety of protein substrates (NBS1, p53, Ku70, etc.) as well as from Histone H4 Lys16 (H4K16). SIRT1 is involved in the regulation of a number of cellular processes, including transcription, metabolism, DNA repair and aging, and increased SIRT1 is associated with extended lifespan of *C. elegans*.

Protein Details: Recombinant SIRT1 (193-741) protein that includes amino acids 193 - 741 of human SIRT1 protein (accession number NM_012238.4) was expressed in *E. coli* and contains an N-terminal GST tag with a molecular weight of 101.5 kDa. The purity of the protein is > 60% by SDS-PAGE.

Application Notes: This protein is useful for histone deacetylase assays and the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



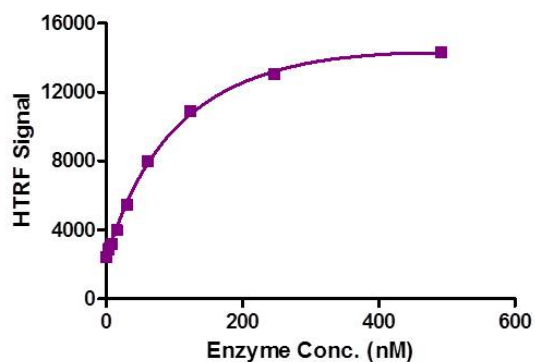
Recombinant SIRT1 (193-741)

12.5% SDS-PAGE with Coomassie Blue staining

MW: 101.5 kDa

Purity: > 60%

SIRT1 (193-741) Titration

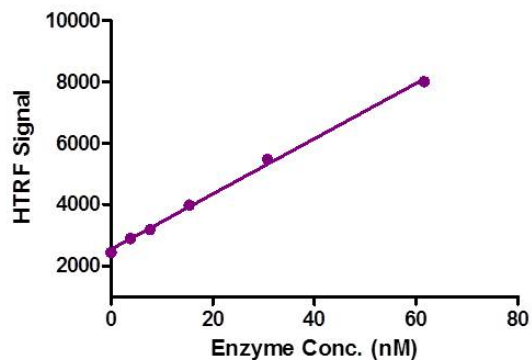


HTRF assay for SIRT1 (193-741) activity

3 μ M histone peptide H3K9ac (1-21) was incubated with SIRT1 (193-741) in reaction buffer for 30 min at 37 $^{\circ}$ C.

Anti-H3K9me0 antibody was used to detect reaction products.

SIRT1 (193-741) Titration



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