

SIRT1 recombinant protein

Recombinant SIRT1 (193-741) protein

CATALOG #
AAA59738

HOST
E Coli

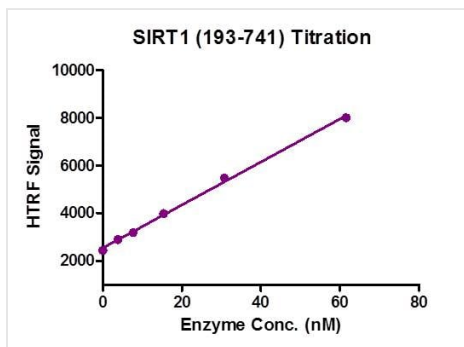
PRODUCT SYNONYMS

SIRT1; Recombinant SIRT1 (193-741) protein; Sirtuin 1; SIRT-1; SIR2-Like Protein; SIR2L1; SIR2alpha; SIRT1 recombinant protein

PRODUCT SPECIFICATIONS

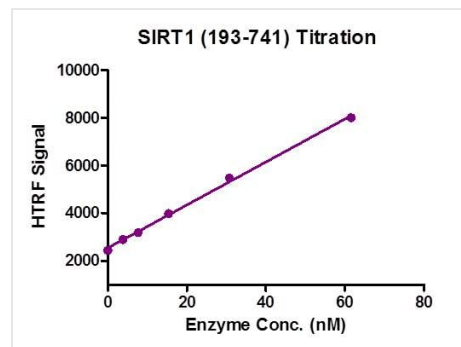
Host	E Coli
Purity/Purification	Recombinant SIRT1 (193-741) protein that includes amino acids 193-741 of human SIRT1 protein (accession number NM_012238.4) was expressed in E Coli and contains an N-terminal GST-Tag with a molecular weight of 101.5 kDa. The purity of the protein is > 80% b
Form/Format	Recombinant SIRT1 (193-741) protein is supplied in 25mM Tris pH8.0, 150mM NaCl, 10% glycerol, and 0.5mM TCEP.
Protein Species	Human
Tag	GST-Tag
Notes	Recombinant SIRT1 protein is useful for histone deacetylase assays and the study of DNA Repair.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



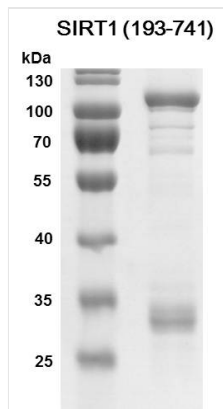
Application Data

HTRF assay for SIRT1 (193-741) activity. 1 μM H3K9ac (1-21aa.) peptide was incubated with different concentrations of SIRT1 (193-741) protein in 10 μl reaction system containing 25 mM Tris-HCl pH 8.0, 137 mM NaCl, 2.7 mM KCl, 1 mM MgCl₂, 0.1 mg/ml BSA and 50 μM NAD⁺ for 30 min at room temperature, then 10 μl anti-H3K9me0 antibody and SA-XL665 mixture (1:100 dilution in HTRF Detection Buffer) was added to each reaction system and incubated for 30 min at room temperature. HTRF assay was used for detection. Fluorescence intensity at 620 nm and 665 nm were measured respectively. The final HTRF signal was obtained by formula: HTRF signal = F665/F620*10000.



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SDS-PAGE

Recombinant SIRT1 (193-741)12.5% SDS-PAGE with Coomassie Blue staining.MW: 101.5 kDaPurity: >80%

ADDITIONAL INFORMATION

Related Product Information for SIRT1 recombinant protein

Short Description: Recombinant SIRT1 (193-741) protein includes amino acids 193-741 of human SIRT1 protein (accession number NM_012238.4); it 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. It is useful for histone deacetylase assays and the study of DNA Repair.

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*.

Product Categories/Family for SIRT1 recombinant protein

Recombinant Proteins; DNA Damage; Histone Deacetylase (HDAC)

NCBI AND UNIPROT INFORMATION

NCBI GenBank Nucleotide

[NM_012238.4](#)

Molecular Weight

Molecular weight of 101.5kDa.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/sirt1-recombinant-protein-e-coli/59738>