

Recombinant SIRT3 (102-399) protein

Catalog No: 31529, 31929

Lot No: 17116001

Expressed In: *E. coli*

Quantity: 100 µg

Concentration: 0.4 µg/µl

Source: Human

Buffer Contents: Recombinant SIRT3 (102-399) protein is supplied at a concentration of 0.4 µg/µl in 25 mM Tris pH 8.0, 150 mM NaCl, 5% glycerol.

Background: SIRT3 (Sirtuin 3) is a member of the SIR2 / Sirtuin family of NAD⁺-dependant deacetylase enzymes. Sirtuin family enzymes can be found in the cytoplasm, mitochondria or nucleus of a cell and are ubiquitously expressed. SIRT3 has multiple targets for deacetylation, including ACSS1, IDH, GDH, SOD2, PDHA1, LCAD, SDHA and the ATP synthase subunit ATP5O. SIRT3 contributes to the regulation of the cellular energy metabolism and tissue-specific ATP levels.

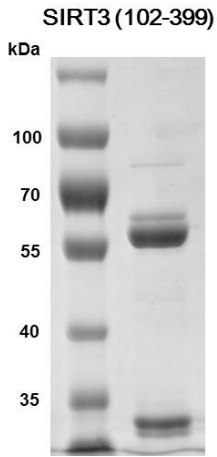
Protein Details: Recombinant SIRT3 (102-399) protein that includes amino acids 102 - 399 of human SIRT3 protein (accession number NM_012239.5) was expressed in *E. coli* and contains an N-terminal GST tag with a molecular weight of 59.7 kDa. The purity of the protein is > 60% by SDS-PAGE.

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

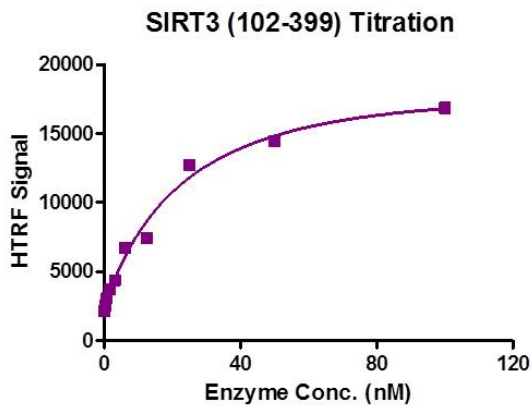
HDAC Activity Assay Conditions: 3 µM histone peptide H3K9ac (1-21aa) was incubated with SIRT3 (102-399) in reaction buffer including 25 mM Tris-HCl pH 8.0, 137 mM NaCl, 2.7 mM MgCl₂, 1 mM KCl, 0.1 mg/ml BSA and 50 µM NAD⁺ for 30 min at 37°C. HTRF assay was used for activity detection.

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.

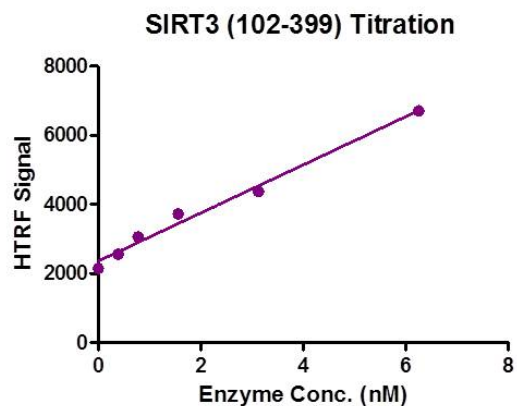


Recombinant SIRT3 (102-399) 12.5% SDS-PAGE Coomassie Blue staining MW: 64.3 kDa
Purity: > 60%



HTRF assay for SIRT3 (102-399) activity

3 μ M histone peptide H3K9ac (1-21) was incubated with SIRT3 (102-399) in reaction buffer for 30 min at 37°C.
Anti-H3K9me0 antibody was used to detect reaction products.



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