



NAD(+)-Dependent Deacetylase SIRT1

Product Data Sheet

For Research Use Only, Not for use in diagnostic procedures

NAD(+)-Dependent Deacetylase SIRT1

Human, recombinant protein expressed in *E. coli.*, Active

Cat# CY-E1151

Amount: 100µg (1.0 µg/µl)

Lot:

Specific Activity: 0.206 units/µg

Introduction:

Sir2 is a conserved protein and was recently shown to regulate lifespan extension both in budding yeast and nematode. In 2000, it was reported that the yeast Sir2 protein is a NAD(+)-dependent histone deacetylase that plays a critical role in transcriptional silencing, genome stability and longevity. A human homologue of Sir2, SIRT1, also functions as a NAD(+)-dependent-p53 deacetylase as well as a NAD(+)-dependent histone deacetylase.

Product Description:

Full-length human SIRT1, containing an N-terminal GST tag, expressed in *E. coli.* and purified by GSH agarose chromatography.

Gene Information:

The gene accession number is NM_012238

Gene Aliases:

SIR2-alpha, SIR2L1

Formulation:

Recombinant SIRT1 is supplied frozen in a buffer containing 50mM NaCl, 20mM Hepes-KOH (pH 7.5), 1mM DTT, 1mM EDTA and 50% glycerol. Use a same buffer without glycerol for dilution when needed.

Molecular Weight:

Recombinant SIRT1 demonstrates approximately 116 kDa band by SDS-PAGE analysis.

Storage:

Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, AVOID REPEATED HANDLING AND MULTIPLE FREEZE/THAW CYCLES.

Stability:

Unopened vial at -70°C, for 1 year after delivery.

Unit Definitions:

One unit is defined as the amount of deacetylase required to release 1 nmol of acetyl groups from CycLex's Fluoro-Substrate Peptide included in Cat# CY-1151 per minute at 20°C.

Specific Activity will vary among production lots.



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References:

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Related Products

- * CycLex NAD(+)-Dependent Deacetylase SIRT1: Cat# CY-E1151
- * CycLex NAD(+)-Dependent Deacetylase SIRT2: Cat# CY-E1152
- * CycLex NAD(+)-Dependent Deacetylase SIRT3: Cat# CY-E1153
- * CycLex NAD(+)-Dependent Deacetylase SIRT6: Cat# CY-E1156
- * CycLex HDACs Deacetylase Fluorometric Assay Kit: Cat# CY-1150
- * CycLex SIRT1 Deacetylase Fluorometric Assay Kit: Cat# CY-1151
- * CycLex SIRT2 Deacetylase Fluorometric Assay Kit: Cat# CY-1152
- * CycLex SIRT3 Deacetylase Fluorometric Assay Kit: Cat# CY-1153
- * CycLex SIRT6 Deacetylase Fluorometric Assay Kit: Cat# CY-1156
- * CycLex HDAC8 Deacetylase Fluorometric Assay Kit: Cat# CY-1158
- * CycLex NAMPT (Nicotinamide Phosphoribosyltransferase): Cat# CY-E1251
- * CycLex NMNAT1 (Nicotinamide Mononucleotide Adenylyltransferase 1): Cat# CY-E1252

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