

Active SIRT7, human recombinant

CATALOG #:	7846-10	10 µg
	7846-50	50 µg
ALTERNATIVE NAMES:	NAD-dependent deacetylase 7; SIR2-like protein 7; Sirtuin 7; SIR2L7; Silent Information Regulator 7	
SOURCE:	<i>E. coli</i>	
FORM:	Liquid.	
FORMULATION:	2 mg/ml in 50 mM Tris, pH 8.0, 100 mM NaCl, containing 5 mM DTT and 20% glycerol.	
PURITY:	≥ 85% by SDS-PAGE	
MOL. WT.:	50.1 kDa (2-400 aa + N-terminal polyhistidine tag).	

STORAGE CONDITIONS: Store at -80° C. Stable for at least 6 months as supplied. It can be further diluted to 0.1-0.5 mg/ml with 50 mM Tris pH 8.0, 100 mM NaCl, containing 5 mM DTT and 20% glycerol, and stored at -80° C in aliquots. Avoid repeated freezing and thawing cycles.

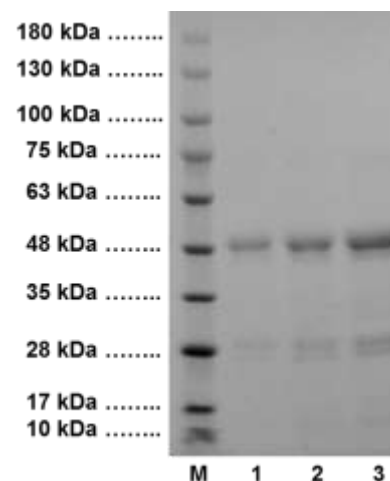
BACKGROUND: The sirtuins represent a distinct class of trichostatin A-insensitive lysyl-deacetylases (class III HDACs) and have been shown to catalyze a reaction that couples lysine deacetylation to the formation of nicotinamide and O-acetyl-ADP-ribose from NAD⁺ and the abstracted acetyl group. There are seven human sirtuins, which have been designated SIRT1-SIRT7. Recently, SIRT7 has been shown to activate transcription by RNA polymerase I and deacetylate p53. SIRT7 prevents progressive functional deterioration of the heart, and is suggested to play an important role in regulation of stress responses and cell death in the heart.

SPECIFIC ACTIVITY: BioVision's Active His-tagged SIRT7 has been tested for its activity using Sirtuin Activity Assay Kit (K324-100). It has a specific activity of >1 µU/mg.

UNIT DEFINITION: One unit of Sirtuin activity is the amount of enzyme that deacetylates an acetylated p53-AFC substrate to finally yield 1 µmol of AFC/min at 37°C.

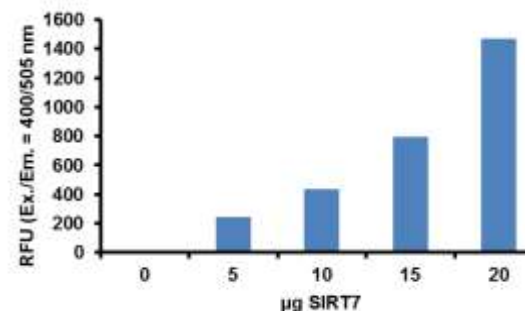
APPLICATIONS: Recombinant human SIRT7 can be used in inhibitor screening assays, activity studies, selectivity profiling, western blotting, ELISA, and numerous such applications.

For Research Use Only! Not to be used in humans.



SDS-PAGE (4-20%) of hSIRT7:

- 1: Protein Marker
- 2: Human SIRT7 (10 µg)
- 3: Human SIRT7 (15 µg)
- 4: Human SIRT7 (20 µg)



Measurement of Human SIRT7 activity by Sirtuin Activity Assay Kit (K324-100).

RELATED PRODUCTS:

- Active SIRT6 (GST-tagged), human recombinant (Cat. No. 7697-20, -100, -1000)
- Active SIRT6 (His-tagged), human recombinant (Cat. No. 7699-20, -100, -1000)
- SIRT1 (193-747 aa) (GST-tagged), Human recombinant (Cat. No. 7264-25, -50)
- SIRT4 (GST-tagged), Human recombinant (Cat. No. 7673-20, -50)
- SIRT5 (GST-tagged), Human recombinant (Cat. No. 7674-20, -50)
- SIRT7 (2-400 aa) (His-tagged), Human recombinant (Cat. No. 7675-20, -50)
- AHCY, human recombinant (Cat. No. 4889-20, -1000)
- SIRT1 Antibody (Cat. No. 6137-100)
- SIRT4 antibody (Cat. No. 3224-100)
- SIRT5 antibody (Cat. No. 3225-100)
- SIRT7 antibody (Cat. No. 3099-100)
- SIRT6 Inhibitor Screening Kit (Fluorometric) (Cat. No. K323-100)