Human SIRT3 Knockdown Cell Line (WB-Validated)

Catalog #: C65604

Aliases

SIRT3; Sirtuin 3; SIR2L3; NAD-Dependent Protein Deacetylase Sirtuin-3, Mitochondrial; Regulatory Protein SIR2 Homolog 3; SIR2-Like Protein 3; Sirtuin (Silent Mating Type Information Regulation 2 Homolog) 3 (S. Cerevisiae); Sirtuin (Silent Mating Type Information Regulation 2, S.Cerevisiae, Homolog) 3; Mitochondrial Nicotinamide Adenine Dinucleotide-Dependent Deacetylase; Silent Mating Type Information Regulation 2, S.Cerevisiae, Homolog 3; NAD-Dependent Deacetylase Sirtuin-3, Mitochondrial; Sirtuin Type 3; EC 2.3.1.286; Sir2-Like 3; HSIRT3

Background

Gene Name: SIRT3
NCBI Gene Entry: 23410

Storage

Store at liquid nitrogen for 1 year.

Kit Components

1. Human SIRT3 Knockdown Cell Line (Wb-Validated)
2. Wild-type cell line

Parental Cell Line

Human cell line supplied by the client

Validation Methods

RT-qPCR, Western blotting (WB)

Shipping

Shipped on Dry Ice.

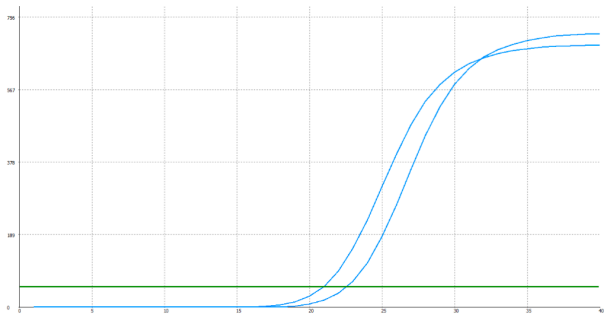
Instructions For Use

This knockdown cell line should be paired with wild-type cell line for use.

Note: This product is for research use only.

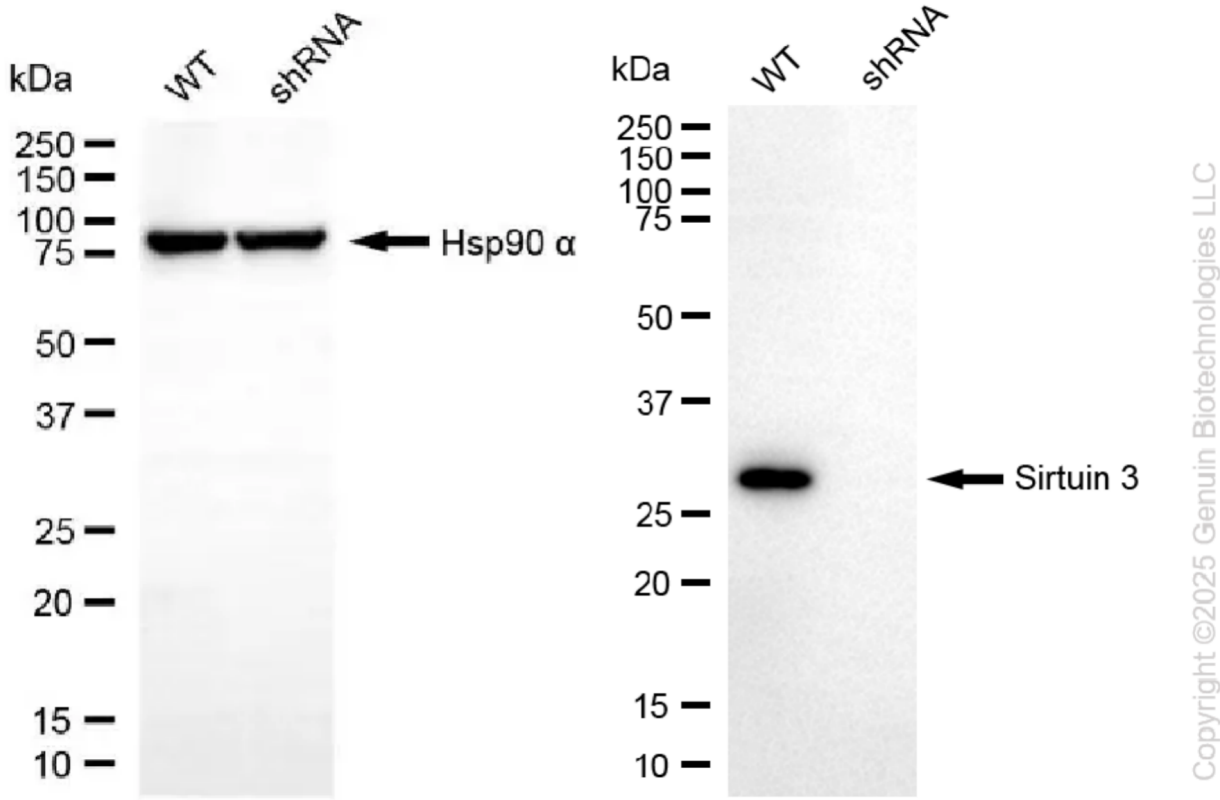
Validation Data

Human SIRT3 Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	20.80
Knock-Down	22.47
ΔCt (Ct_{KD}-Ct_{WT})	1.67
% mRNA Reduction	⬇ 69%

RT-qPCR analysis. HeLa cells were infected with SIRT3-specific shRNA lentiviral particles, total RNA was extracted from wild-type and knockdown cells, RT-qPCR was performed using gene-specific primers. ΔCt (CtKD-CtWT) was used to calculate mRNA reduction (%) between wild-type and knockdown cells using the following formula: (1-1/2ΔCt) x 100%.



Western blotting analysis.SIRT3 protein expression in wild-type (WT) and shRNA knockdown (KD) HeLa cells was detected using Western blotting. Hsp90 α served as a loading control. The blots were incubated with primary antibodies against SIRT3 and Hsp90 α, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQ™ ECL Substrate Kit.