Human NMNAT1 Knockdown Cell Line (WB-Validated)

Catalog #: C64842

Aliases

NMNAT1; Nicotinamide Nucleotide Adenylyltransferase 1; NMNAT; Nicotinamide/Nicotinic Acid Mononucleotide Adenylyltransferase 1; PNAT1; Nicotinate-Nucleotide Adenylyltransferase 1; NMN/NaMN Adenylyltransferase 1; NaMN Adenylyltransferase 1; NMN Adenylyltransferase 1; LCA9; Nicotinamide Mononucleotide Adenylyltransferase 1; Nicotinamide-Nucleotide Adenylyltransferase 1; Nicotinamide Nucleotide Adenylyltransferase; Pyridine Nucleotide Adenylyltransferase 1; Leber'S Congenital Amaurosis 9; Leber Congenital Amaurosis 9; EC 2.7.7.18; EC 2.7.7.1; SHILCA

Background

Gene Name: NMNAT1
NCBI Gene Entry: 64802

Storage

Store at liquid nitrogen for 1 year.

Kit Components

1. Human NMNAT1 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.

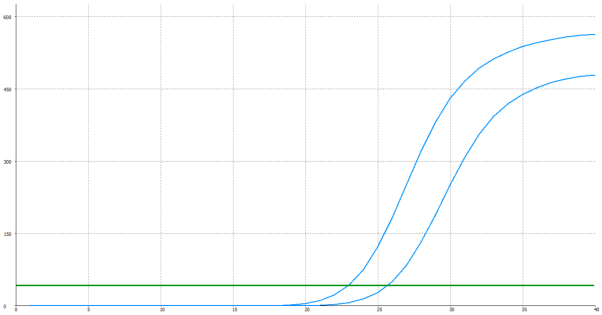
Instructions For Use

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

Note: This product is for research use only.

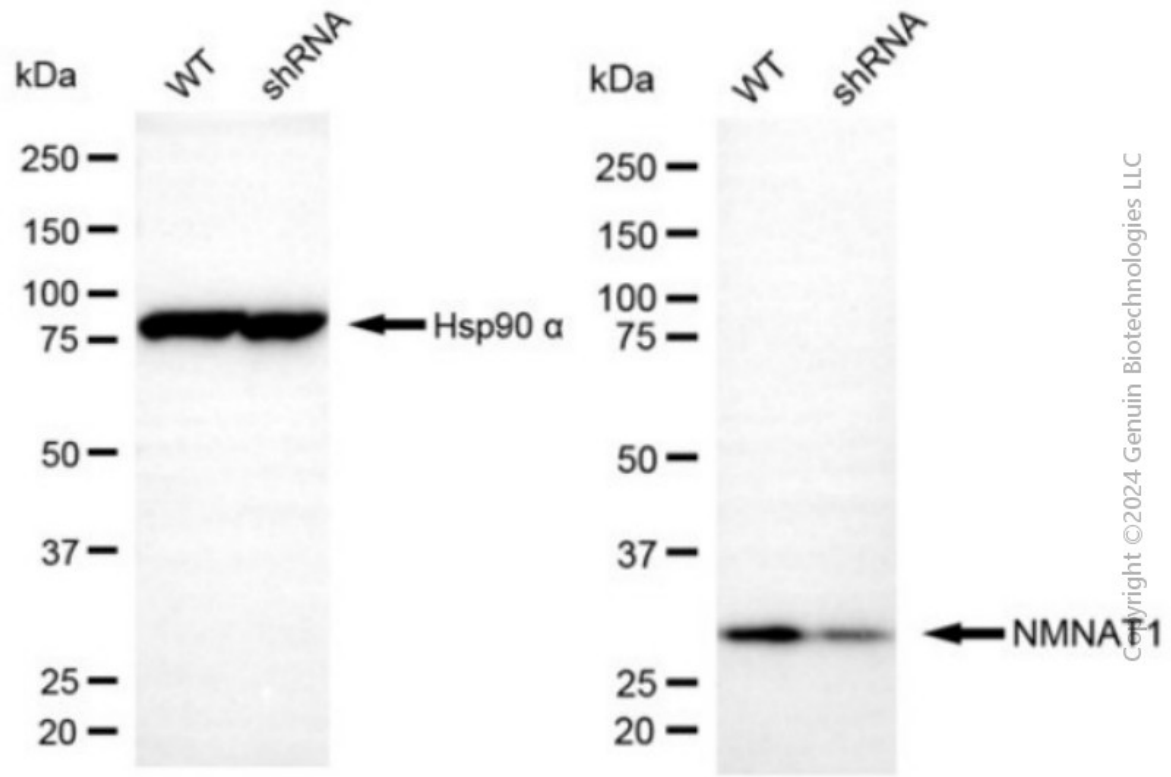
Validation Data

Human NMNAT1 Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	22.87
Knock-Down	25.29
$\Delta Ct\ (Ct_{KD}\text{-}Ct_{WT})$	2.42
% mRNA Reduction	⬇ 81%

RT-qPCR analysis. HeLa cells were infected with NMNAT1-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. NMNAT1 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 NMNAT1 and Hsp90 α, respectively, followed by incubating with HRP-conjugated goat anti-mouse secondary antibody.

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Images were developed using FeQ™ ECL Substrate Kit.