Human NDUFS1 Knockdown Cell Line (WB-Validated)

Catalog #: C65225

Aliases

NDUFS1; NADH:Ubiquinone Oxidoreductase Core Subunit S1; NADH-Ubiquinone Oxidoreductase 75 KDa Subunit, Mitochondrial; CI-75k; NADH Dehydrogenase (Ubiquinone) Fe-S Protein 1, 75kDa (NADH-Coenzyme Q Reductase); Complex I 75kDa Subunit 2 3NADH Dehydrogenase (Ubiquinone) Fe-S Protein 1 (75kD) (NADH-Coenzyme Q Reductase); Mitochondrial NADH-Ubiquinone Oxidoreductase 75 KDa Subunit; Complex I, Mitochondrial Respiratory Chain, 75-KD Subunit; Complex I-75kD; EC 7.1.1.2; CI-75Kd; PRO1304; CI-75kD; MC1DN5

Background

Gene Name: NDUFS1
NCBI Gene Entry: 4719

Storage

Store at liquid nitrogen for 1 year.

Kit Components

1. Human NDUFS1 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.

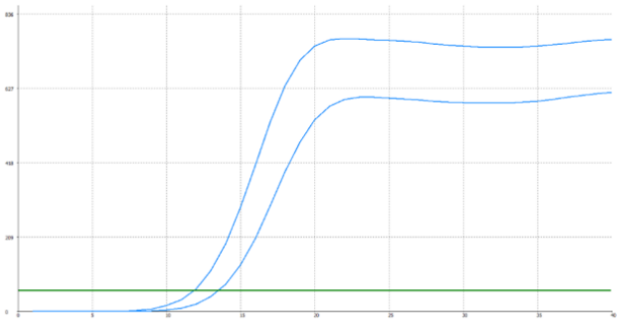
Instructions For Use

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

Note: This product is for research use only.

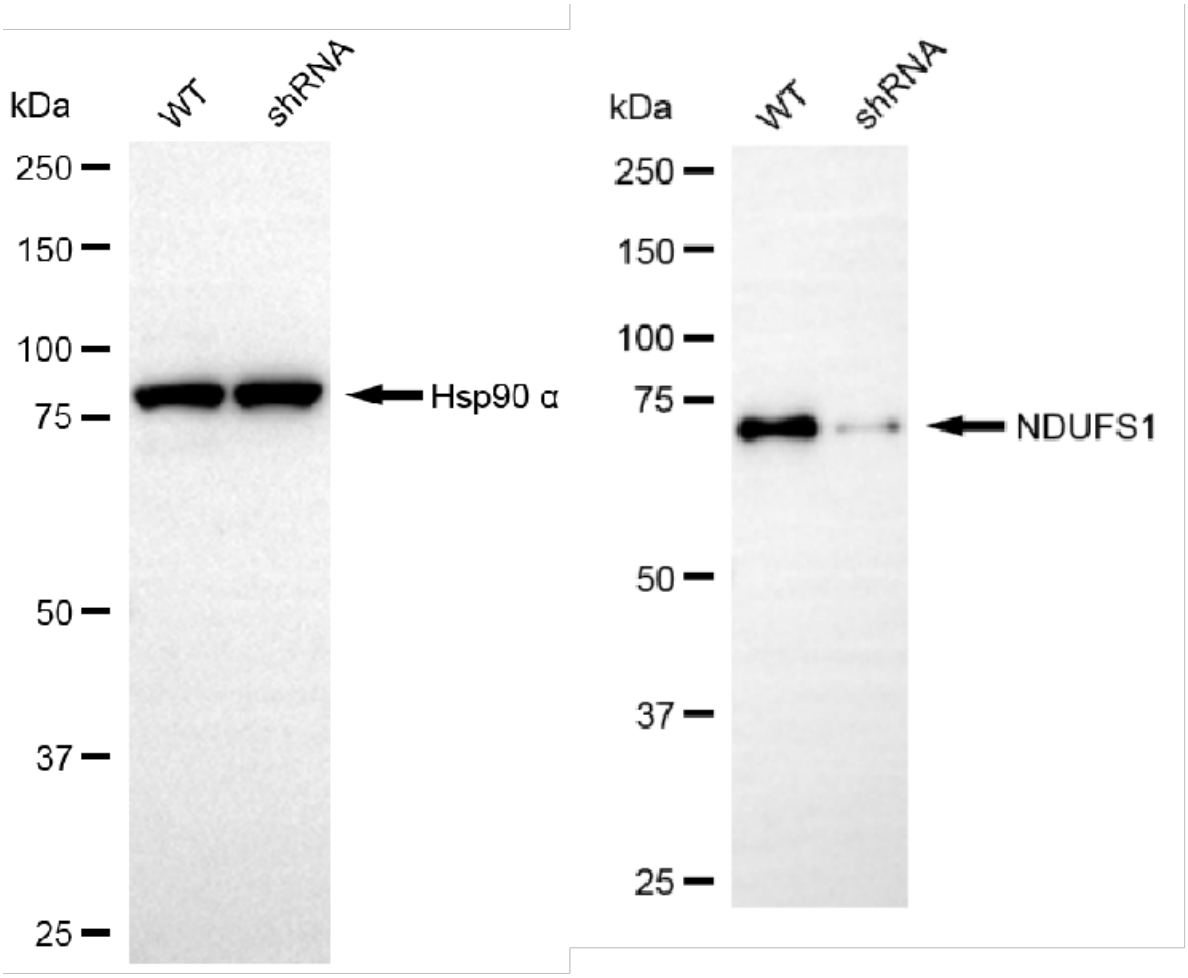
Validation Data

Human NDUFS1 Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	11.71
Knock-Down	13.07
ΔCt (Ct_{KD}-Ct_{WT})	1.36
% mRNA Reduction	⬇ 61%

RT-qPCR analysis. HT-1080 cells were infected with NDUFS1-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. NDUFS1 protein expression in wild-type (WT) and shRNA knockdown (KD) HT-1080 cells was detected using Western blotting. Hsp90 α served as a loading control. The blots were incubated with primary antibodies against NDUFS1 and Hsp90 α, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were

developed using FeQ™ ECL Substrate Kit.