Human NKX2-1 Knockdown Cell Line (WB-Validated)

Catalog #: C63388

Aliases

NKX2-1; NK2 Homeobox 1; TTF-1; TTF1; Thyroid Transcription Factor 1; NKX2A; TITF1; Thyroid-Specific Enhancer-Binding Protein; Homeobox Protein NK-2 Homolog A; Homeobox Protein Nkx-2.1; Thyroid Nuclear Factor 1; T/EBP; BCH; NK-2 Homolog A; Benign Chorea; NKX2.1; NMTC1; NK-2; TEBP; BHC

Background

Gene Name: NKX2-1
NCBI Gene Entry: 7080

Storage

Store at liquid nitrogen for 1 year.

Kit Components

1. Human NKX2-1 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.

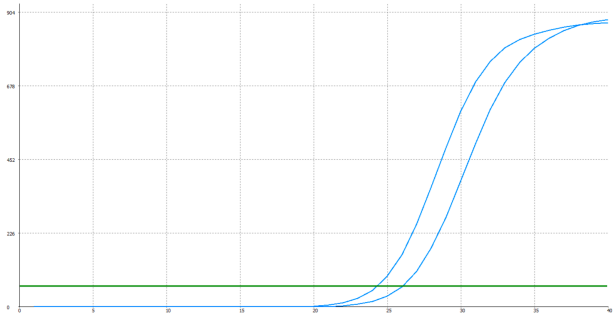
Instructions For Use

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

Note: This product is for research use only.

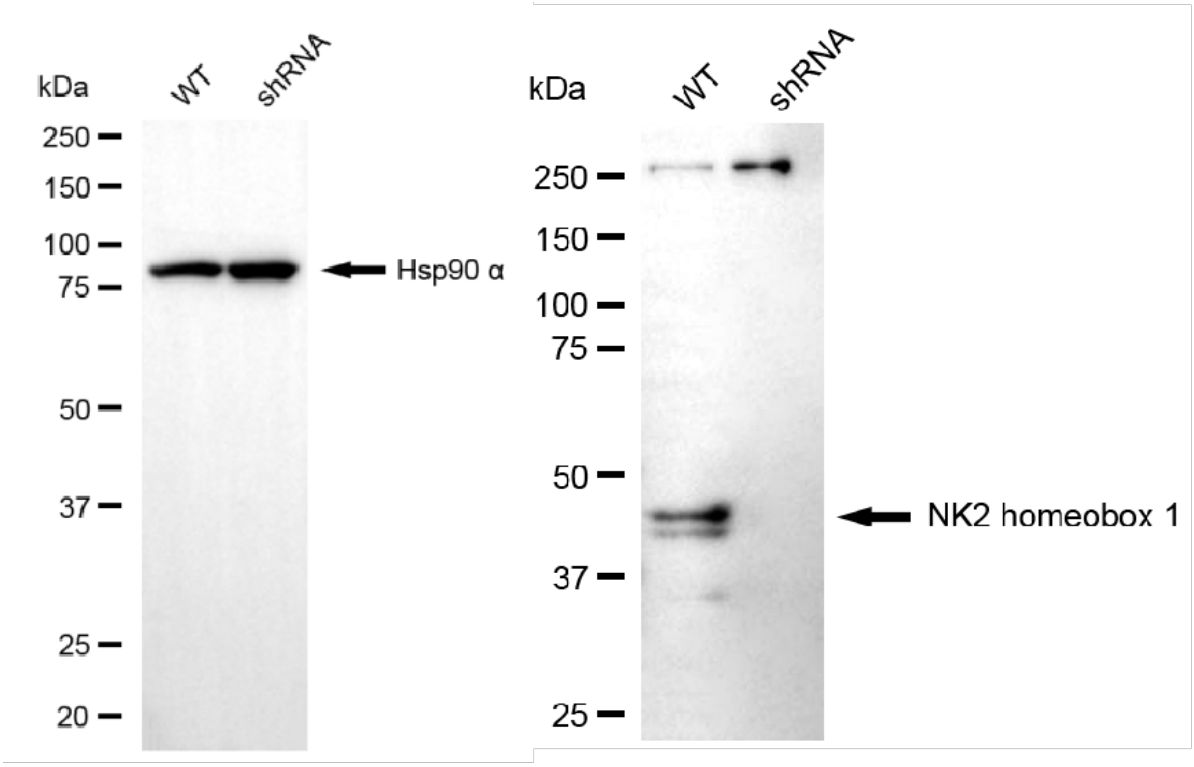
Validation Data

Human NKX2-1 Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	24.27
Knock-Down	26.02
$\Delta Ct\ (Ct_{KD}\text{-}Ct_{WT})$	1.75
% mRNA Reduction	⬇ 70%

RT-qPCR analysis. HeLa cells were infected with NKX2-1-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. NKX2-1 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 NKX2-1 and Hsp90 α, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQ™ ECL Substrate Kit.