Human NQO1 Knockdown Cell Line (WB-Validated)



Catalog #: C62335

Aliases

NAD(P)H Quinone Dehydrogenase 1; QR1; DTD; DT-Diaphorase; NMOR1; DHQU; DIA4; Diaphorase (NADH/NADPH) (Cytochrome B-5 Reductase); NAD(P)H Dehydrogenase [Quinone] 1; NAD(P)H Dehydrogenase, Quinone 1; NAD(P)H:Quinone Oxidoreductase 1; NAD(P)H-Quinone Oxidoreductase; Phylloquinone Reductase; Menadione Reductase; Quinone Reductase 1; Azoreductase; EC 1.6.5.2; NAD(P)H:Quinone Acceptor Oxidoreductase Type 1; NAD(P)H:Menadione Oxidoreductase 1; NAD(P)H:Quinone Oxireductase; Dioxin-Inducible 1; Quinone Reductase; Diaphorase-4; NMORI

Background

Gene Name: NQO1 NCBI Gene Entry: 1728

Storage

Store at liquid nitrogen for 1 year.

Kit Components

- 1. Human NQO1 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.

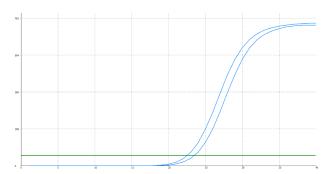
Instructions For Use

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

Note: This product is for research use only.

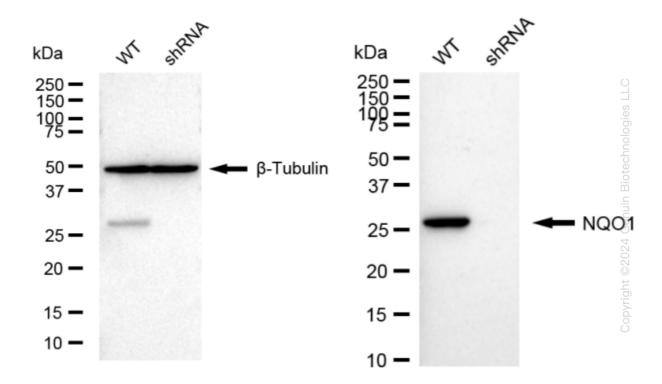
Validation Data

Human NQO1 Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	22.50
Knock-Down	23.41
$\Delta Ct (Ct_{KD}-Ct_{WT})$	0.91
% mRNA Reduction	47 %

RT-qPCR analysis. HeLa cells were infected with NQO1-specific shRNA lentiviral particles, total RNA was extracted from wild-type and knockdown cells, RT-qPCR was performed using gene-specific primers. Δ Ct (CtKD-CtWT) was used to calculate mRNA reduction (%) between wild-type and knockdown cells using the following formula: $(1-1/2\Delta$ Ct) x 100%.



Western blotting analysis. NQO1 protein expression in wild-type (WT) and shRNA knockdown (KD) HeLa cells was detected using Western blotting. β -Tubulin served as a loading control. The blots were incubated with primary antibodies against NQO1 and β -Tubulin, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQTM ECL Substrate Kit.