Human ATP7B Knockdown Cell Line (WB-Validated)

Catalog #: C61654

Aliases

ATP7B; ATPase Copper Transporting Beta; Copper-Transporting ATPase 2; Copper Pump 2; WND; ATPase, Cu++ Transporting, Beta Polypeptide; Wilson Disease-Associated Protein; PWD; WC1; ATPase, Cu++ Transporting, Beta Polypeptide (Wilson Disease); ATPase, Cu(2+)-Transporting, Beta Polypeptide; Copper-Transporting Protein ATP7B; Wilson Disease; EC 7.2.2.8; EC 3.6.3.4; EC 3.6.3; WD

Background

Gene Name: ATP7B
NCBI Gene Entry: 540

Storage

Store at liquid nitrogen for 1 year.

Kit Components

1. Human ATP7B 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.

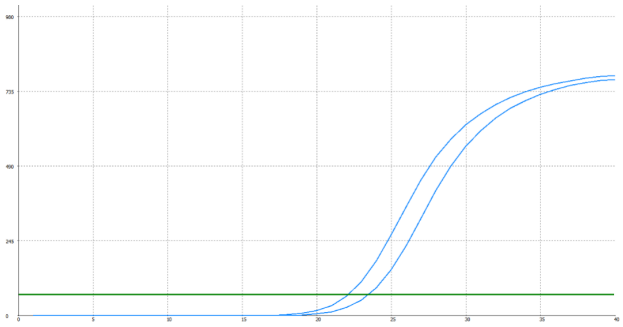
Instructions For Use

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

Note: This product is for research use only.

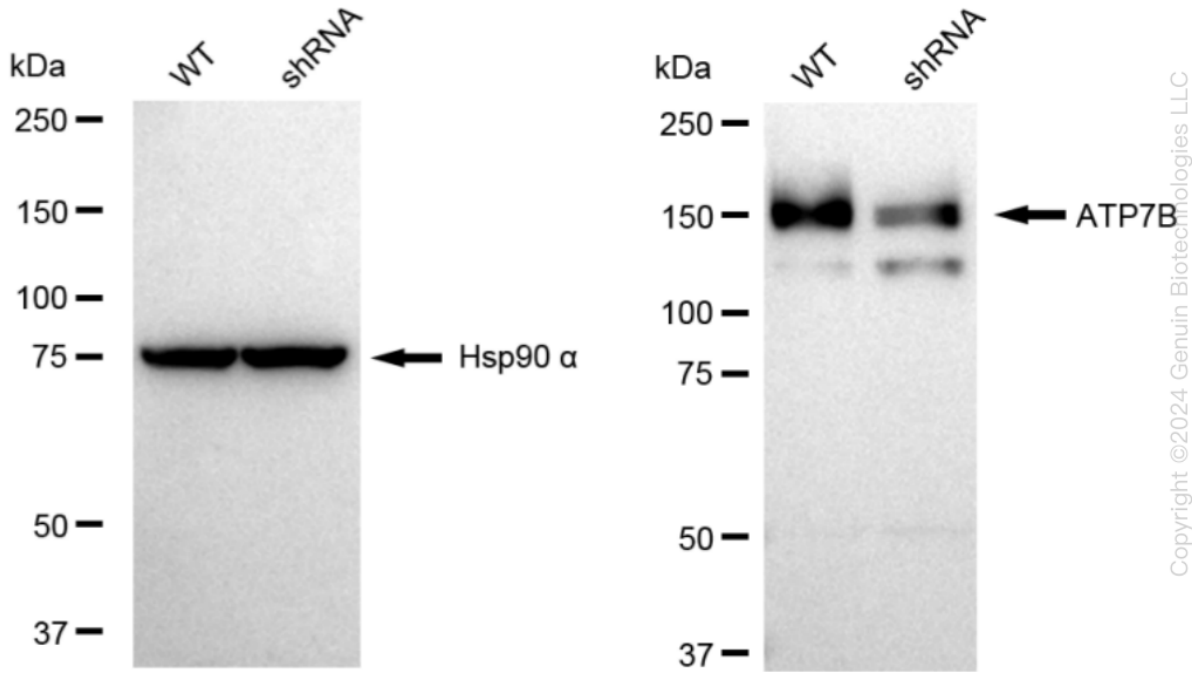
Validation Data

Human ATP7B Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	21.76
Knock-Down	23.11
ΔCt (Ct_{KD}-Ct_{WT})	1.35
% mRNA Reduction	⬇ 61%

RT-qPCR analysis. HT-1080 cells were infected with ATP7B-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. ATP7B 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 ATP7B and Hsp90 α, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQ™ ECL Substrate Kit.