Human GPX1 Knockdown Cell Line (WB-Validated)



Catalog #: C63187

Aliases

GPX1; Glutathione Peroxidase 1; Phospholipid-Hydroperoxide Glutathione Peroxidase GPX1; Cellular Glutathione Peroxidase; Selenoprotein GPX1; EC 1.11.1.9; GSHPx-1; EC 1.11.1.12; EC 1.11.1; GSHPX1; GPx-1; GPXD

Background

Gene Name: GPX1 NCBI Gene Entry: 2876

Storage

Store at liquid nitrogen for 1 year.

Kit Components

- 1. Human GPX1 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.

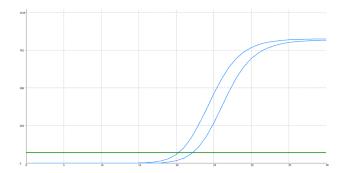
Instructions For Use

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

Note: This product is for research use only.

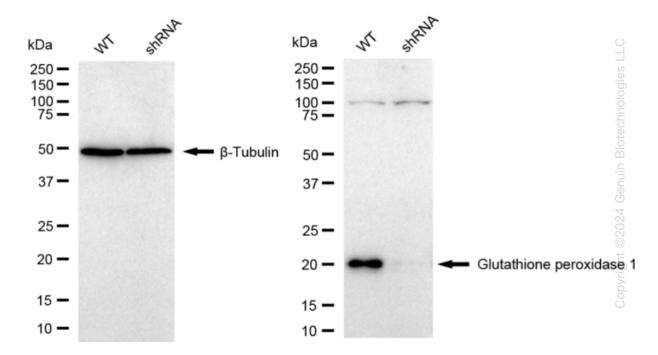
Validation Data

Human GPX1 Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	20.03
Knock-Down	21.87
ΔCt (Ct _{KD} -Ct _{WT})	1.84
% mRNA Reduction	↓ 72%

RT-qPCR analysis. HeLa cells were infected with GPX1-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. GPX1 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 GPX1 and β -Tubulin, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQTM ECL Substrate Kit.