Human PRDX4 Knockdown Cell Line (WB-Validated)



Catalog #: C62596

Aliases

Peroxiredoxin 4; AOE37-2; Thioredoxin-Dependent Peroxide Reductase A0372; Thioredoxin-Dependent Peroxiredoxin 4; Thioredoxin Peroxidase AO372; Antioxidant Enzyme AOE372; Peroxiredoxin IV; Peroxiredoxin-4; Prx-IV; Epididymis Secretory Sperm Binding Protein Li 97n; Thioredoxin Peroxidase (Antioxidant Enzyme); EC 1.11.1.24; EC 1.11.1.15; HEL-S-97n; AOE372; PRX-4

Background

Gene Name: PRDX4 NCBI Gene Entry: 10549

Storage

Store at liquid nitrogen for 1 year.

Kit Components

- 1. Human PRDX4 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.

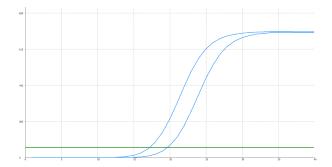
Instructions For Use

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

Note: This product is for research use only.

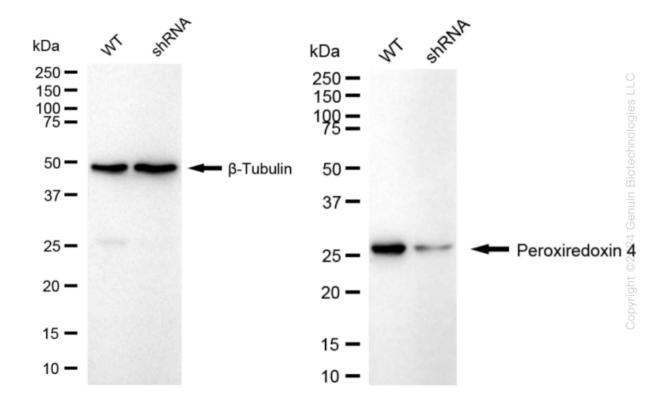
Validation Data

Human PRDX4 Knockdown Cell Line (WB-Validated)



| Genotype | Ct Value |
|---|--------------|
| Wild-Type | 19.36 |
| Knock-Down | 21.22 |
| Δ Ct (Ct _{KD} -Ct _{WT}) | 1.86 |
| % mRNA Reduction | ↓ 72% |

RT-qPCR analysis. HeLa cells were infected with PRDX4-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. PRDX4 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 PRDX4 and β -Tubulin, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQTM ECL Substrate Kit.