Human G6PD Knockdown Cell Line (WB-Validated)

Catalog #: C3662

Aliases

G6PD; Glucose-6-Phosphate Dehydrogenase; G6PD1; Glucose-6-Phosphate 1-Dehydrogenase; EC 1.1.1.49; Epididymis Secretory Sperm Binding Protein

Background

Gene Name: G6PD
NCBI Gene Entry: 2539

Storage

Store at liquid nitrogen for 1 year.

Kit Components

1. Human G6PD 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.

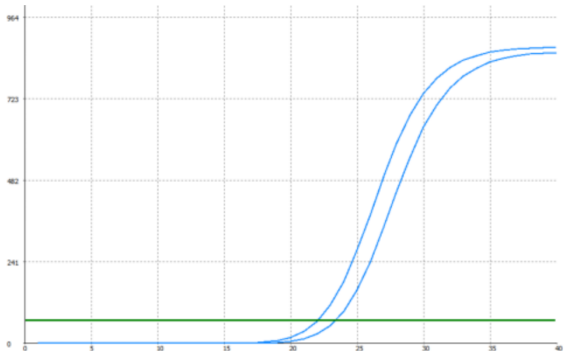
Instructions For Use

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 G6PD Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	21.92
Knock-Down	23.19
ΔCt (Ct_{KD}-Ct_{WT})	1.27
% mRNA Reduction	⬇ 59%

RT-qPCR analysis. HeLa cells were infected with G6PD-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%.

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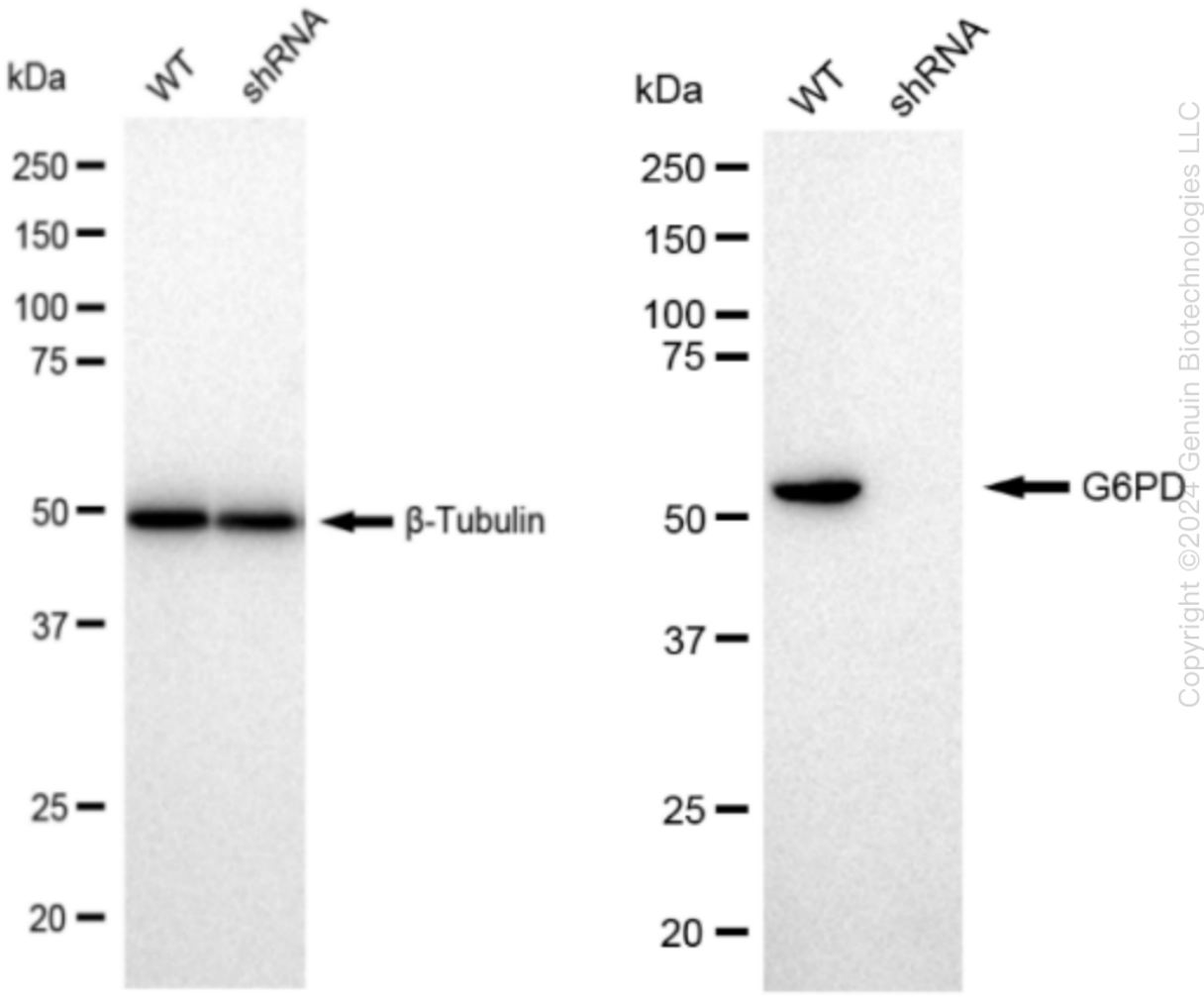

Western blotting analysis. G6PD protein expression in wild-type (WT) and shRNA knockdown (KD) HeLa cells was detected using Western blotting. β-Tubulin served as a loading control. The blots were incubated with primary antibodies (Cat#63652, 1:5,000) against G6PD and β-Tubulin, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000). Images were developed using FeQ™ ECL Substrate Kit (Cat#226).