Human PRKDC Knockdown Cell Line (WB-Validated)



Catalog #: C61159

Aliases

PRKDC; Protein Kinase, DNA-Activated, Catalytic Subunit; DNPK1; P460; DNA-Dependent Protein Kinase Catalytic Subunit; DNA-PKcs; DNA-PKC; DNAPK; XRCC7; HYRC1; P350; HYRC; Protein Kinase, DNA-Activated, Catalytic Polypeptide; DNA-PK Catalytic Subunit; EC 2.7.11.1; DNAPKc; Hyper-Radiosensitivity Of Murine Scid Mutation, Complementing 1; DNA-PKCS; DNAPKC; IMD26

Background

Gene Name: PRKDC NCBI Gene Entry: 5591

Storage

Store at liquid nitrogen for 1 year.

Kit Components

- 1. Human PRKDC 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.

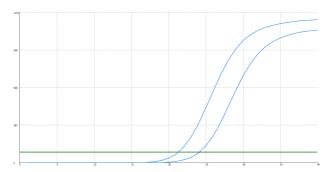
Instructions For Use

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

Note: This product is for research use only.

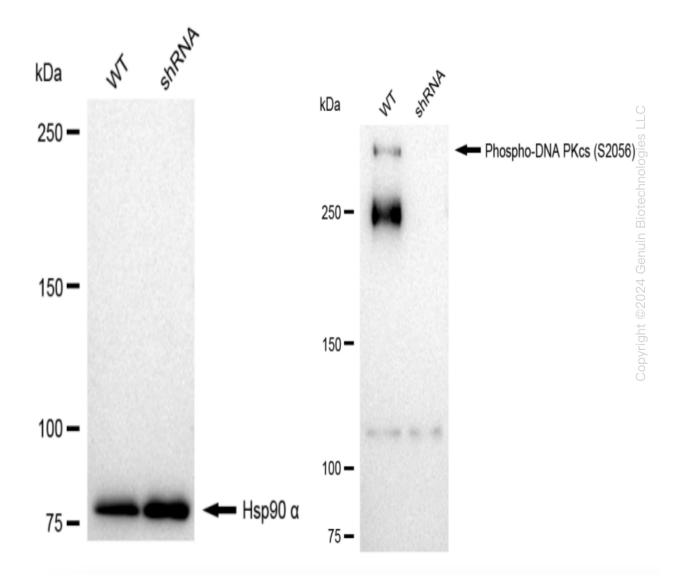
Validation Data

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Genotype	Ct Value
Wild-Type	21.22
Knock-Down	23.92
Δ Ct (Ct _{KD} -Ct _{WT})	2.7
% mRNA Reduction	♣ 85%

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



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Western blotting analysis. PRKDC protein expression in wild-type (WT) and shRNA knockdown (KD) HeLa cells was detected using Western blotting. Hsp90 α served as a loading control. The blots were incubated with primary antibodies (Cat#61165, 1:5,000) against PRKDC and Hsp90 α, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000). Images were developed using FeQTM ECL Substrate Kit (Cat#226).