Human LIG4 Knockdown Cell Line (WB-Validated)



Catalog #: C61478

Aliases

LIG4; DNA Ligase 4; Polydeoxyribonucleotide Synthase [ATP] 4; DNA Ligase IV; Ligase IV, DNA, ATP-Dependent; Polynucleotide Ligase; DNA Repair Enzyme; DNA Joinase; EC 6.5.1.1; Sealase; LIG4S

Background

Gene Name: LIG4 NCBI Gene Entry: 3981

Storage

Store at liquid nitrogen for 1 year.

Kit Components

- 1. Human LIG4 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.

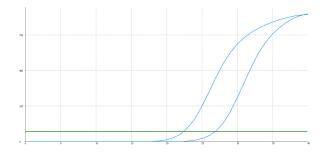
Instructions For Use

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

Note: This product is for research use only.

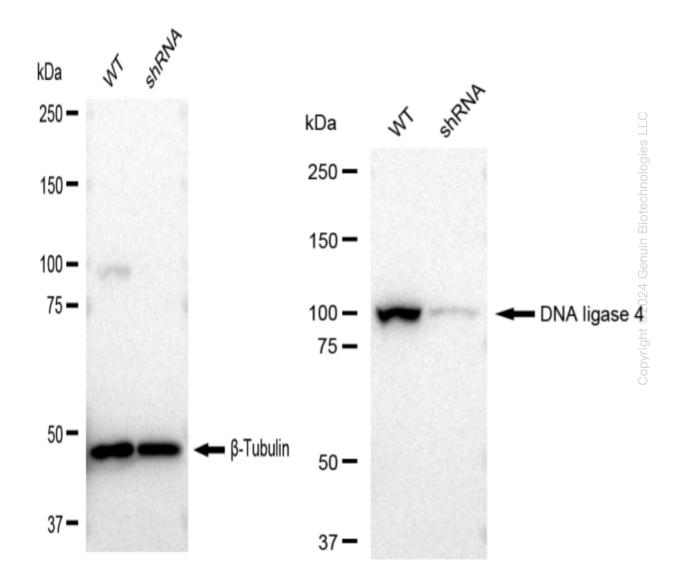
Validation Data

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Genotype	Ct Value
Wild-Type	22.25
Knock-Down	26.7
$\Delta Ct (Ct_{KD}-Ct_{WT})$	4.45
% mRNA Reduction	J 95%

RT-qPCR analysis. HeLa cells were infected with LIG4-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. LIG4 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#61478, 1:5,000) against LIG4 and β -Tubulin , 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).