

Human POLG Knockdown Cell Line (WB-Validated)



Catalog #: C62489

Aliases

POLG; DNA Polymerase Gamma, Catalytic Subunit; POLG1; POLGA; Mitochondrial DNA Polymerase Catalytic Subunit; Polymerase (DNA) Gamma, Catalytic Subunit; Polymerase (DNA Directed), Gamma; DNA Polymerase Subunit Gamma-1; PolG-Alpha; EC 2.7.7.7; MDP1; Mitochondrial Polymerase Gamma Catalytic Subunit; MTDPS4A; MTDPS4B; MIRAS; SANDO; SCAE; PEO

Background

Gene Name: POLG
NCBI Gene Entry: [5428](#)

Storage

Store at liquid nitrogen for 1 year.

Kit Components

1. Human POLG 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

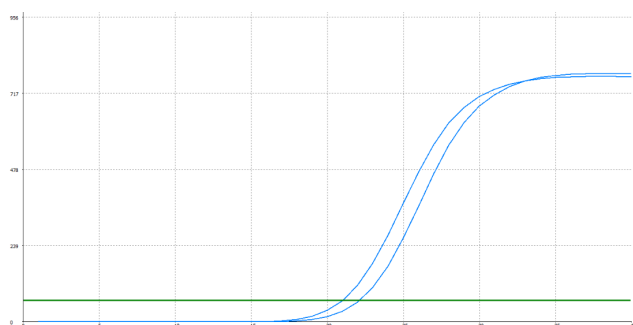
SUPPORT

SUPPORT@GENUINBIOTECH.COM
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ORDERS

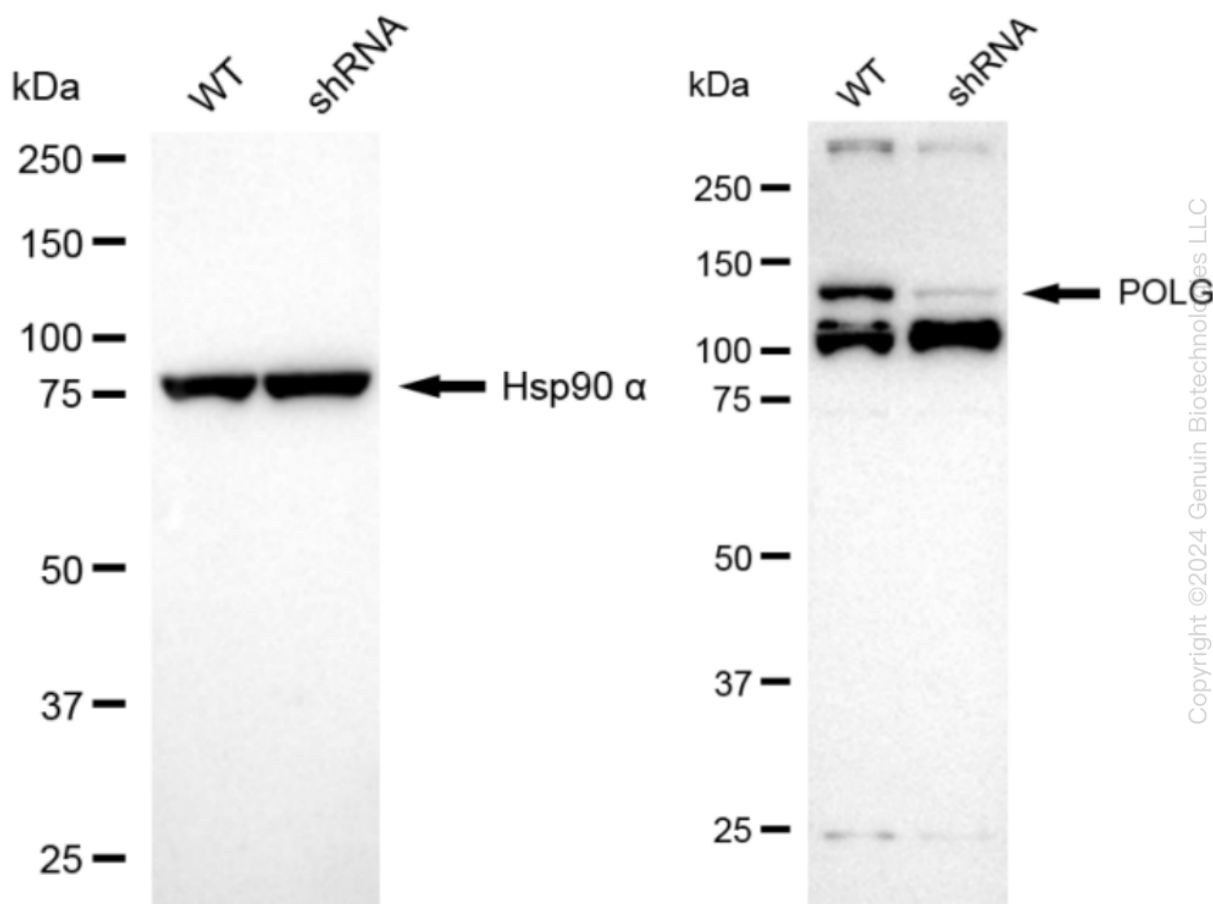
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Genotype	Ct Value
Wild-Type	20.62
Knock-Down	21.79
ΔCt (Ct _{KD} -Ct _{WT})	1.17
% mRNA Reduction	↓ 56%

RT-qPCR analysis. HT-1080 cells were infected with POLG-specific shRNA lentiviral particles, total RNA was extracted from wild-type and knockdown cells, RT-qPCR was performed using gene-specific primers. ΔCt (Ct_{KD}-Ct_{WT}) was used to calculate mRNA reduction (%) between wild-type and knockdown cells using the following formula: $(1-1/2^{\Delta Ct}) \times 100\%$.



Western blotting analysis. POLG protein expression in wild-type (WT) and shRNA knockdown (KD) HT-1080 cells was detected using Western blotting. Hsp90 α served as a loading control. The blots were incubated with primary antibodies against POLG and Hsp90 α , respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQ™ ECL Substrate Kit.