Human USP14 Knockdown Cell Line (WB-Validated)



Catalog #: C62631

Aliases

USP14; Ubiquitin Specific Peptidase 14; TGT; Ubp6; Ubiquitin Specific Peptidase 14 (TRNA-Guanine Transglycosylase); Ubiquitin Specific Protease 14 (TRNA-Guanine Transglycosylase); Ubiquitin Carboxyl-Terminal Hydrolase 14; Deubiquitinating Enzyme 14; Ubiquitin Thioesterase 14; TRNA-Guanine Transglycosylase, 60-KD Subunit; Ubiquitin-Specific Processing Protease 14; Ubiquitin-Specific-Processing Protease 14; Ubiquitin Thiolesterase 14; EC 3.4.19.12; EC 3.1.2.15

Background

Gene Name: USP14 NCBI Gene Entry: 9097

Storage

Store at liquid nitrogen for 1 year.

Kit Components

- 1. Human USP14 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.

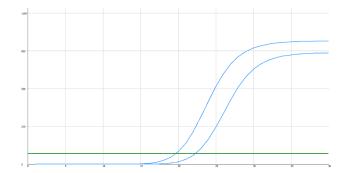
Instructions For Use

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

Note: This product is for research use only.

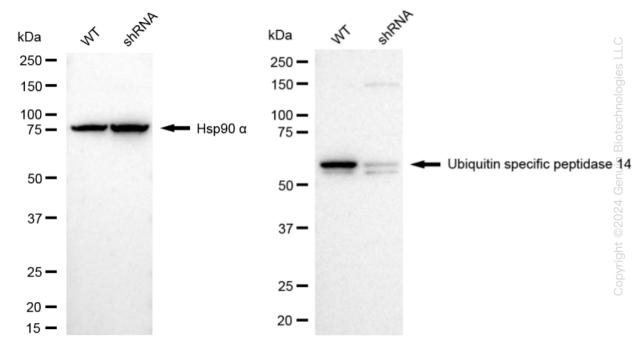
Validation Data

Human USP14 Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	19.33
Knock-Down	21.73
Δ Ct (Ct _{KD} -Ct _{WT})	2.40
% mRNA Reduction	↓ 81%

RT-qPCR analysis. HeLa cells were infected with USP14-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. USP14 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 against USP14 and Hsp90 α , respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQTM ECL Substrate Kit.