Human CTSB Knockdown Cell Line (WB-Validated)

Catalog #: C69771

Aliases

CTSB; Cathepsin B; APP Secretase; Cathepsin B1; EC 3.4.22.1; APPS; CPSB; KeRatolytic Winter Erythema (Oudtshoorn Skin Disease); Epididymis Secretory Sperm Binding Protein; Amyloid Precursor Protein Secretase; Cysteine Protease; EC 3.4.22; RECEUP; KWE

Background

Gene Name: CTSB
NCBI Gene Entry: 1508

Storage

Store at liquid nitrogen for 1 year.

Kit Components

1. Human CTSB 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.

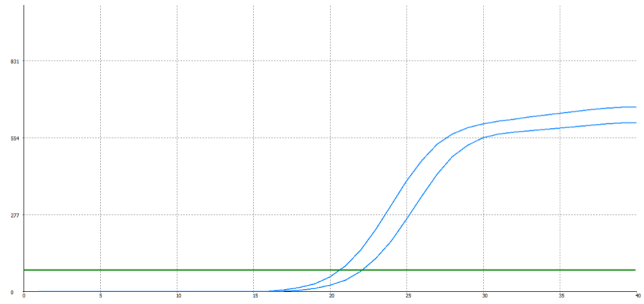
Instructions For Use

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

Note: This product is for research use only.

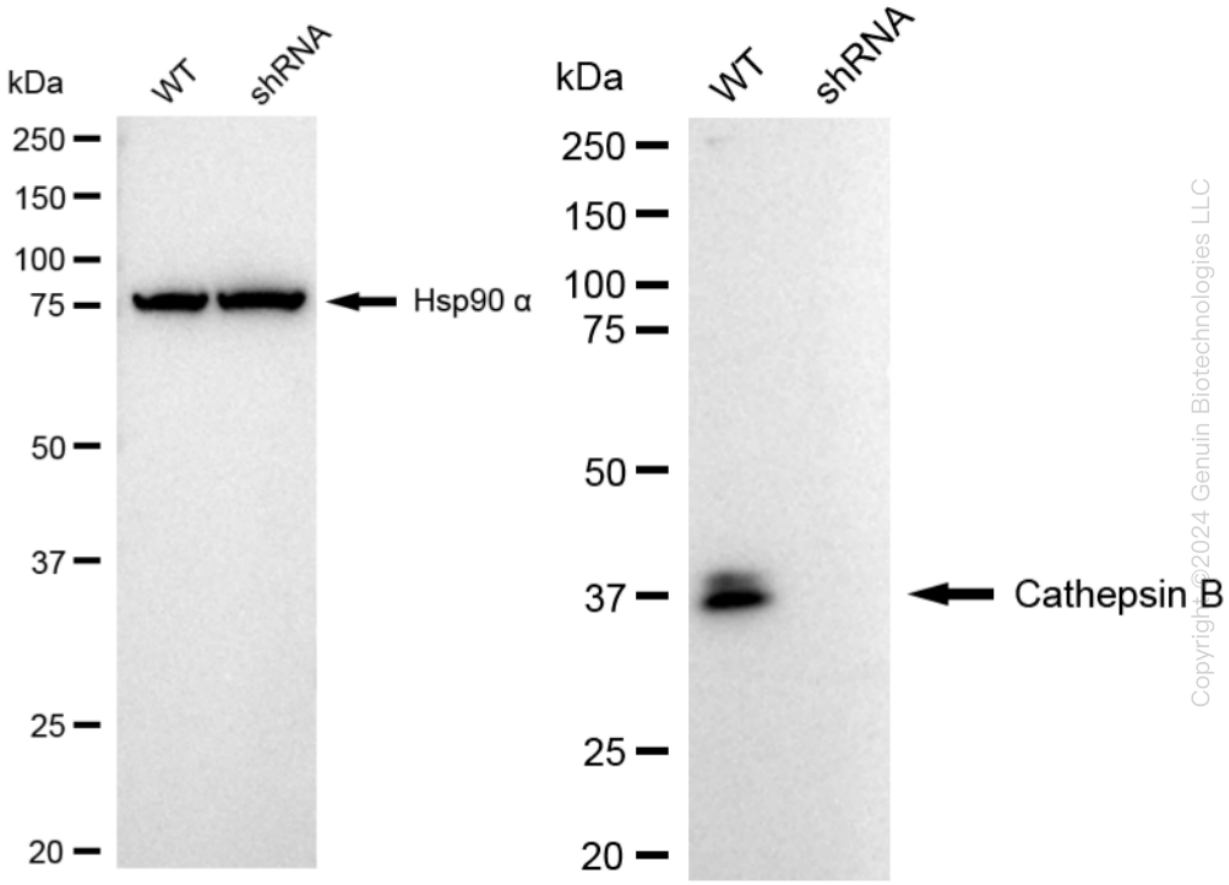
Validation Data

Human CTSB Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	19.74
Knock-Down	21.04
ΔCt (Ct_{KD}-Ct_{WT})	1.30
% mRNA Reduction	⬇ 59%

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



Western blotting analysis. CTSB 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 CTSB and Hsp90 α, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQ™ ECL Substrate Kit.