# **Human CTSD Knockdown Cell Line (WB-Validated)**



**Catalog #: C61363** 

#### **Aliases**

CTSD; Cathepsin D; CLN10; CPSD; Ceroid-Lipofuscinosis, Neuronal 10; EC 3.4.23.5; Epididymis Secretory Sperm Binding Protein Li 130P; Cathepsin D (Lysosomal Aspartyl Protease); Lysosomal Aspartyl Protease; Lysosomal Aspartyl Protease; HEL-S-130P; EC 3.4.23

## **Background**

Gene Name: CTSD NCBI Gene Entry: 1509

## **Storage**

Store at liquid nitrogen for 1 year.

## **Kit Components**

- 1. Human CTSD 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.

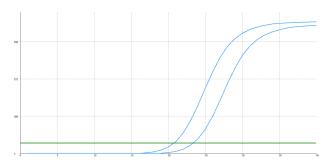
### **Instructions For Use**

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

**Note:** This product is for research use only.

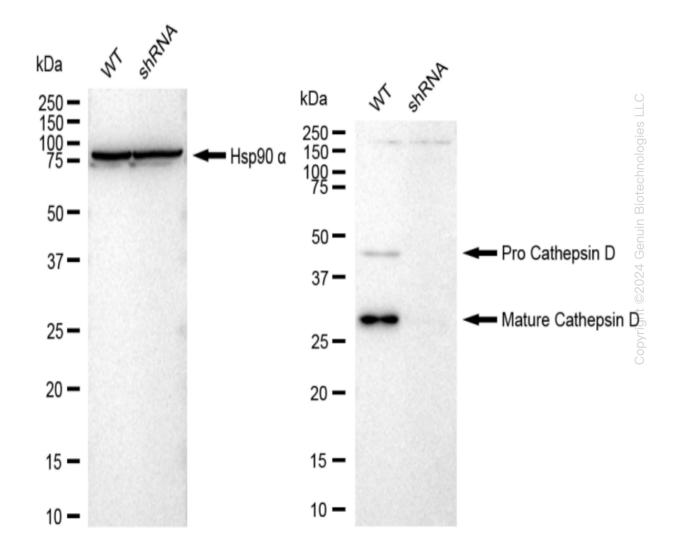
#### **Validation Data**

# **Human CTSD Knockdown Cell Line (WB-Validated)**



Genotype	Ct Value
Wild-Type	20.54
Knock-Down	23.14
$\Delta Ct (Ct_{KD}-Ct_{WT})$	2.6
% mRNA Reduction	<b>4</b> 84%

RT-qPCR analysis. HeLa cells were infected with CTSD-specific shRNA lentiviral particles, total RNA was extracted from wild-type and knockdown cells, RT-qPCR was performed using gene-specific primers.  $\Delta$ 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. CTSD protein expression in wild-type (WT) and shRNA knockdown

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# **Human CTSD Knockdown Cell Line (WB-Validated)**

(KD) HeLa cells was detected using Western blotting. Hsp90  $\alpha$  served as a loading control. The blots were incubated with primary antibodies (Cat#61363, 1:5,000) against CTSD and Hsp90  $\alpha$ , respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000). Images were developed using FeQ<sup>TM</sup> ECL Substrate Kit (Cat#226).