

# Human CPS1 Knockdown Cell Line (WB-Validated)



**Catalog #: C61251**

## Aliases

CPS1; Carbamoyl-Phosphate Synthase 1; GATD6; Carbamoyl-Phosphate Synthase [Ammonia], Mitochondrial; Carbamoyl-Phosphate Synthase 1, Mitochondrial; Carbamoyl-Phosphate Synthase (Ammonia); EC 6.3.4.16; Carbamoyl-Phosphate Synthetase 1, Mitochondrial; Carbamoyl-Phosphate Synthetase I; Carbamoylphosphate Synthetase I; CPSase I; CPSASE1; PHN

## Background

Gene Name: CPS1

NCBI Gene Entry: [1373](#)

## Storage

Store at liquid nitrogen for 1 year.

## Kit Components

1. Human CPS1 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  
TEL: +1-540-855-7041

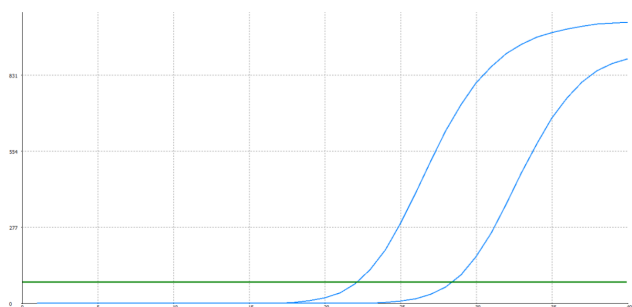
### ORDERS

SALES@GENUINBIOTECH.COM  
FAX: +1-540-855-7041

[WWW.GENUINBIOTECH.COM](http://WWW.GENUINBIOTECH.COM)

## Human CPS1 Knockdown Cell Line (WB-Validated)

PAGE 2



Genotype	Ct Value
Wild-Type	22.04
Knock-Down	28.07
$\Delta Ct (Ct_{KD} - Ct_{WT})$	6.03
% mRNA Reduction	↓ 99%

Copyright ©2024 Genuin Biotechnologies LLC

RT-qPCR analysis. HeLa cells were infected with CPS1-specific shRNA lentiviral particles, total RNA was extracted from wild-type and knockdown cells, RT-qPCR was performed using gene-specific primers.  $\Delta Ct (Ct_{KD} - Ct_{WT})$  was used to calculate mRNA reduction (%) between wild-type and knockdown cells using the following formula:  $(1 - 1/2^{\Delta Ct}) \times 100\%$ .

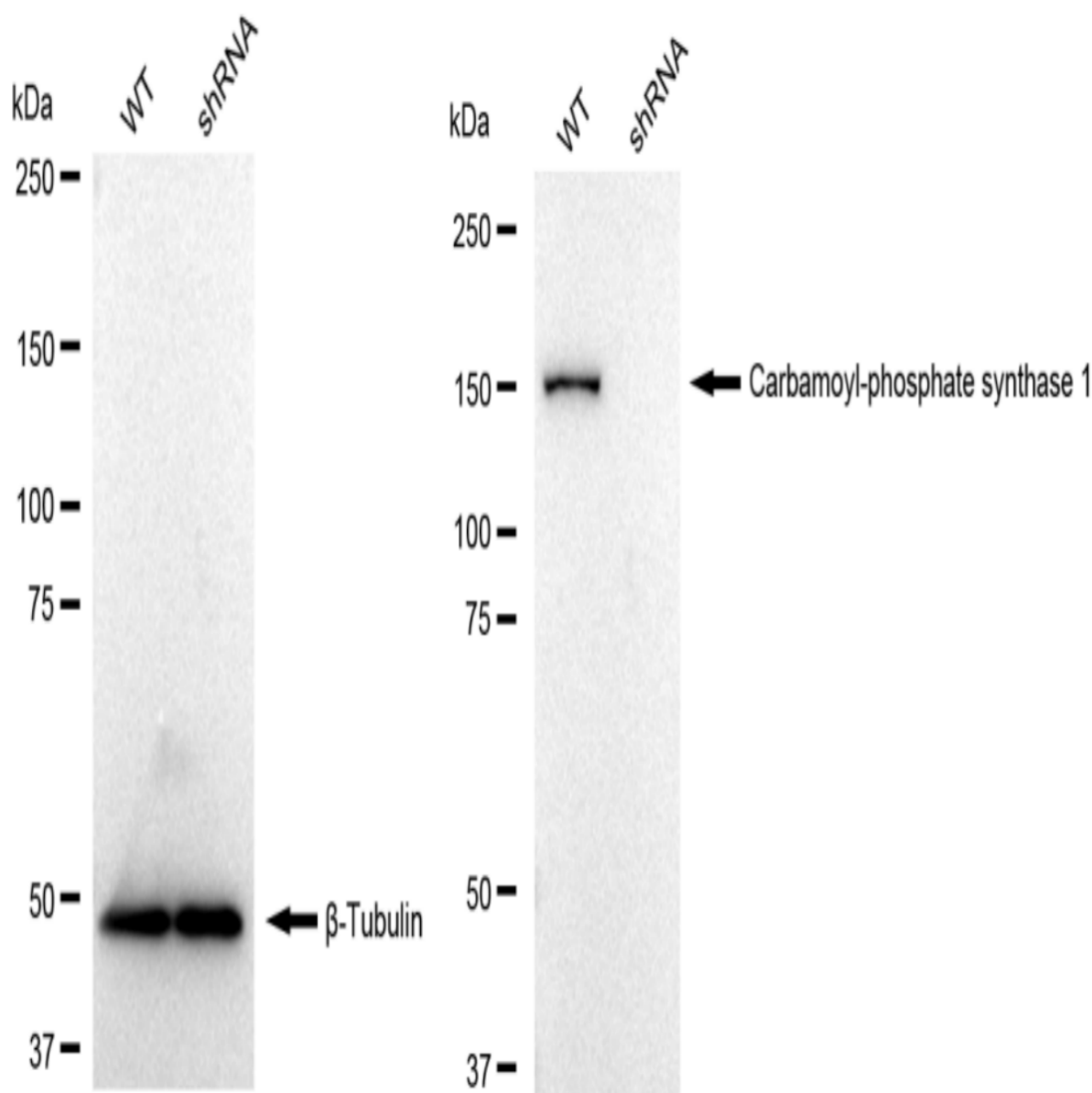
### SUPPORT

SUPPORT@GENUINBIOTECH.COM  
TEL: +1-540-855-7041

### ORDERS

SALES@GENUINBIOTECH.COM  
FAX: +1-540-855-7041

[WWW.GENUINBIOTECH.COM](http://WWW.GENUINBIOTECH.COM)



Copyright ©2024 Genuin Biotechnologies LLC

Western blotting analysis. CPS1 protein expression in wild-type (WT) and shRNA knockdown (KD) HeLa cells was detected using Western blotting.  $\beta$ -Tubulin served as a loading control. The blots were incubated with primary antibodies (Cat#61251, 1:5,000) against CPS1 and  $\beta$ -Tubulin, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000). Images were developed using FeQ™ ECL Substrate Kit (Cat#226).

### SUPPORT

SUPPORT@GENUINBIOTECH.COM  
TEL: +1-540-855-7041

### ORDERS

SALES@GENUINBIOTECH.COM  
FAX: +1-540-855-7041

[WWW.GENUINBIOTECH.COM](http://WWW.GENUINBIOTECH.COM)