Human CBS Knockdown Cell Line (WB-Validated)

Catalog #: C61446

Aliases

CBS; Cystathionine Beta-Synthase; HIP4; Serine Sulfhydrase; Beta-Thionase; EC 4.2.1.22; Cystathionine Beta-Synthase-Like Protein; Cystathionine-Beta-Synthase; Methylcysteine Synthase; CBSL

Background

Gene Name: CBS
NCBI Gene Entry: 875

Storage

Store at liquid nitrogen for 1 year.

Kit Components

1. Human CBS 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.

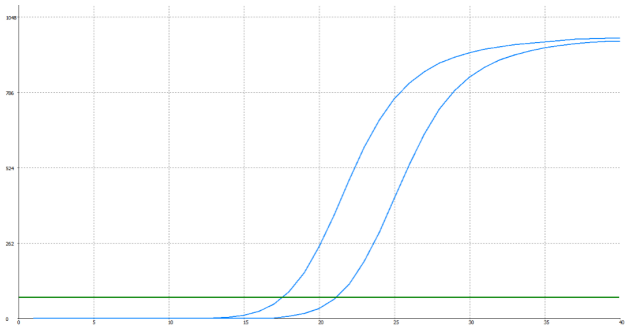
Instructions For Use

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

Note: This product is for research use only.

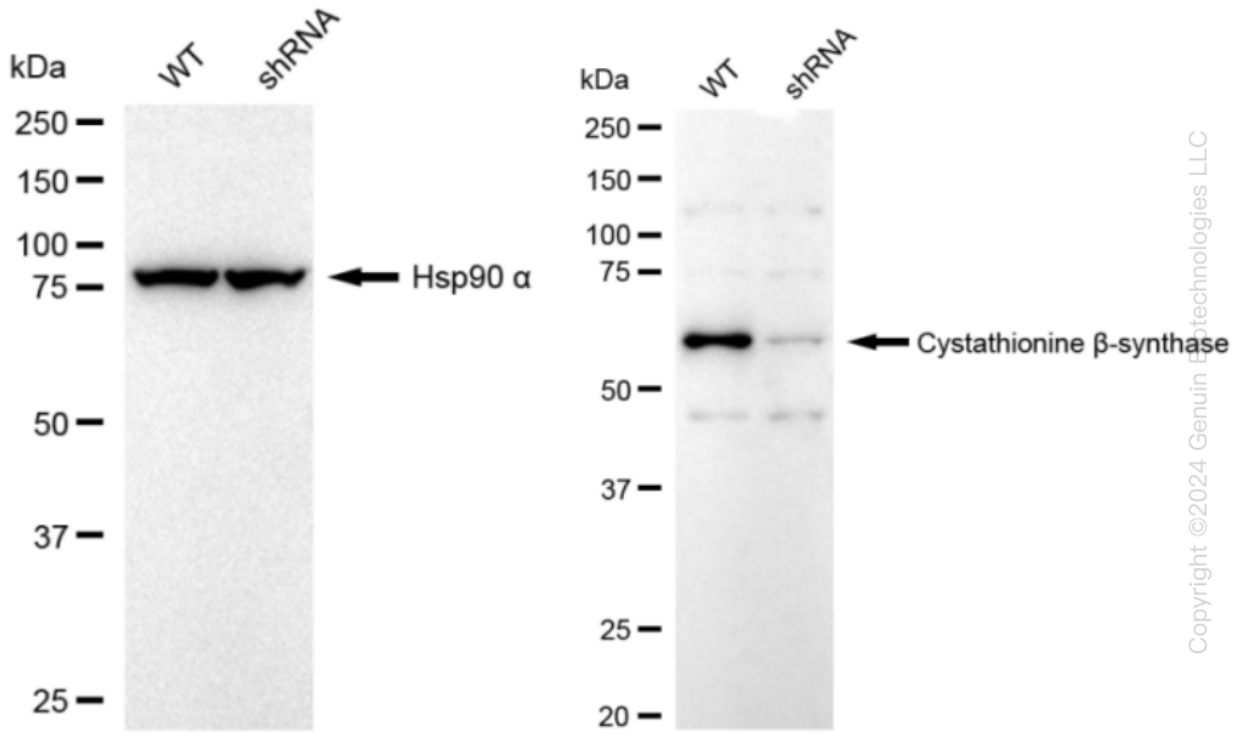
Validation Data

Human CBS Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	17.46
Knock-Down	21.03
ΔCt (Ct_{KD}-Ct_{WT})	3.57
% mRNA Reduction	⬇ 92%

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