

# Human MARS1 Knockdown Cell Line (WB-Validated)



**Catalog #: C65212**

## Aliases

MARS1; Methionyl-TRNA Synthetase 1; MetRS; Methionine--TRNA Ligase, Cytoplasmic; SPG70; CMT2U; MARS; Methionyl-TRNA Synthetase; EC 6.1.1.10; Methionine TRNA Ligase 1, Cytoplasmic; Cytosolic Methionyl-TRNA Synthetase; ILFS2; MTRNS; ILLD; TTD9; MRS

## Background

Gene Name: MARS1  
NCBI Gene Entry: [4141](#)

## Storage

Store at liquid nitrogen for 1 year.

## Kit Components

1. Human MARS1 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

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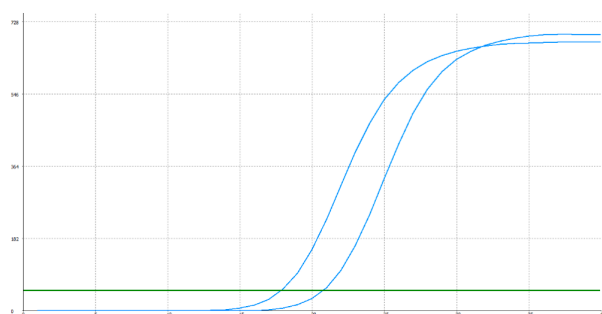
### SUPPORT

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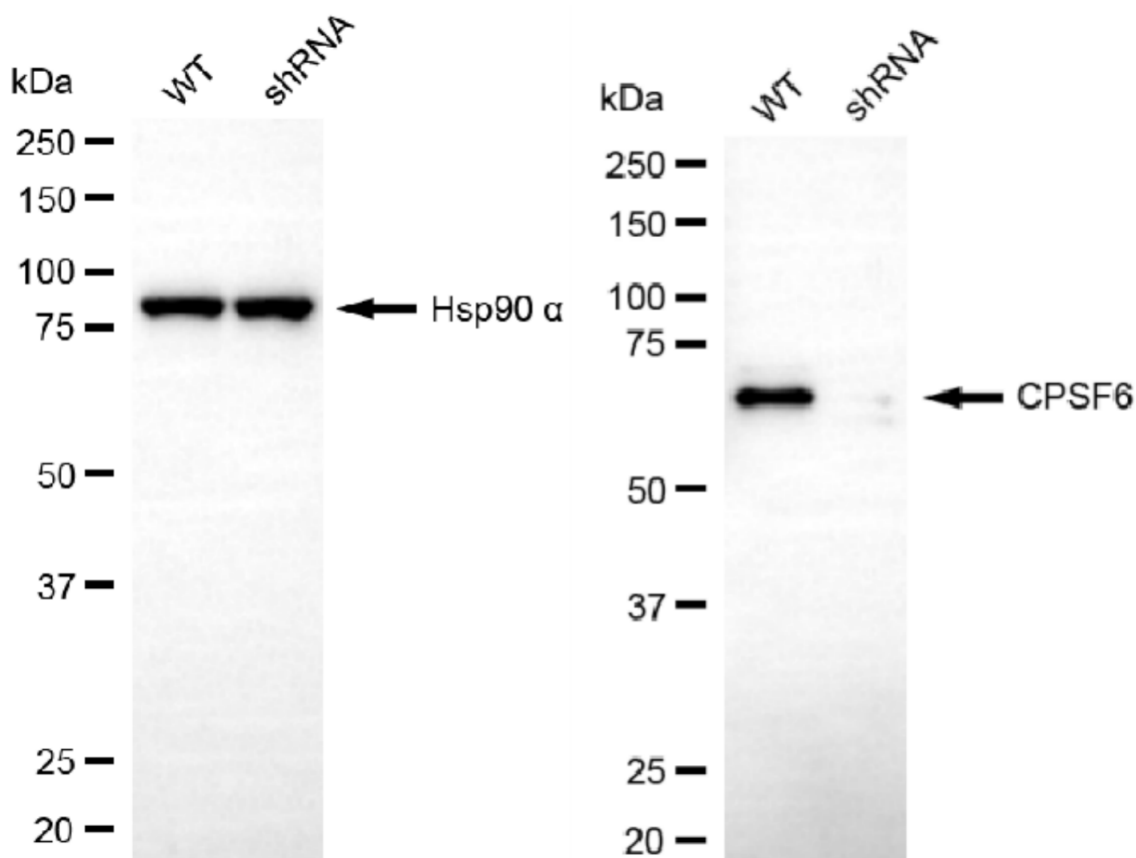
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Genotype	Ct Value
Wild-Type	17.76
Knock-Down	20.67
$\Delta Ct (Ct_{KD} - Ct_{WT})$	2.91
% mRNA Reduction	↓ 87%

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RT-qPCR analysis. HeLa cells were infected with MARS1-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:  $(1 - 1/2^{\Delta Ct}) \times 100\%$ .



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Western blotting analysis. MARS1 protein expression in wild-type (WT) and shRNA knockdown (KD) HeLa cells was detected using Western blotting. Hsp90  $\alpha$  served as a loading control. The blots were incubated with primary antibodies against MARS1 and Hsp90  $\alpha$ , respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed

## **Human MARS1 Knockdown Cell Line (WB-Validated)**

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using NaQ™ ECL Substrate Kit.

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