

# Human KARS1 Knockdown Cell Line (WB-Validated)



**Catalog #: C61196**

## Aliases

KARS1; Lysyl-TRNA Synthetase 1; KARS2; KARS; Lysyl-TRNA Synthetase; Lysine--TRNA Ligase; Lysine TRNA Ligase; EC 6.1.1.6; DFNB89; LysRS; Deafness, Autosomal Recessive 89; EC 2.7.7.-; KIAA0070; EC 6.1.1; CMTRIB; DEAPLE; LEPID; KRS

## Background

Gene Name: KARS1  
NCBI Gene Entry: [3735](#)

## Storage

Store at liquid nitrogen for 1 year.

## Kit Components

1. Human KARS1 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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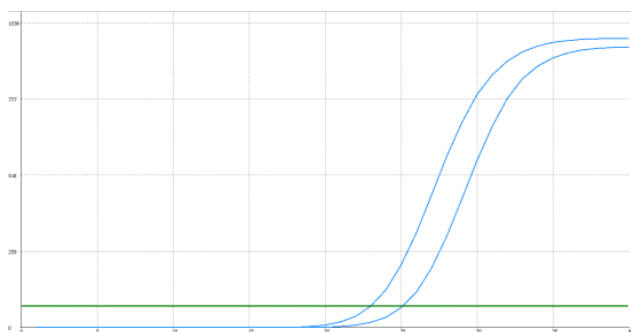
### SUPPORT

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

### ORDERS

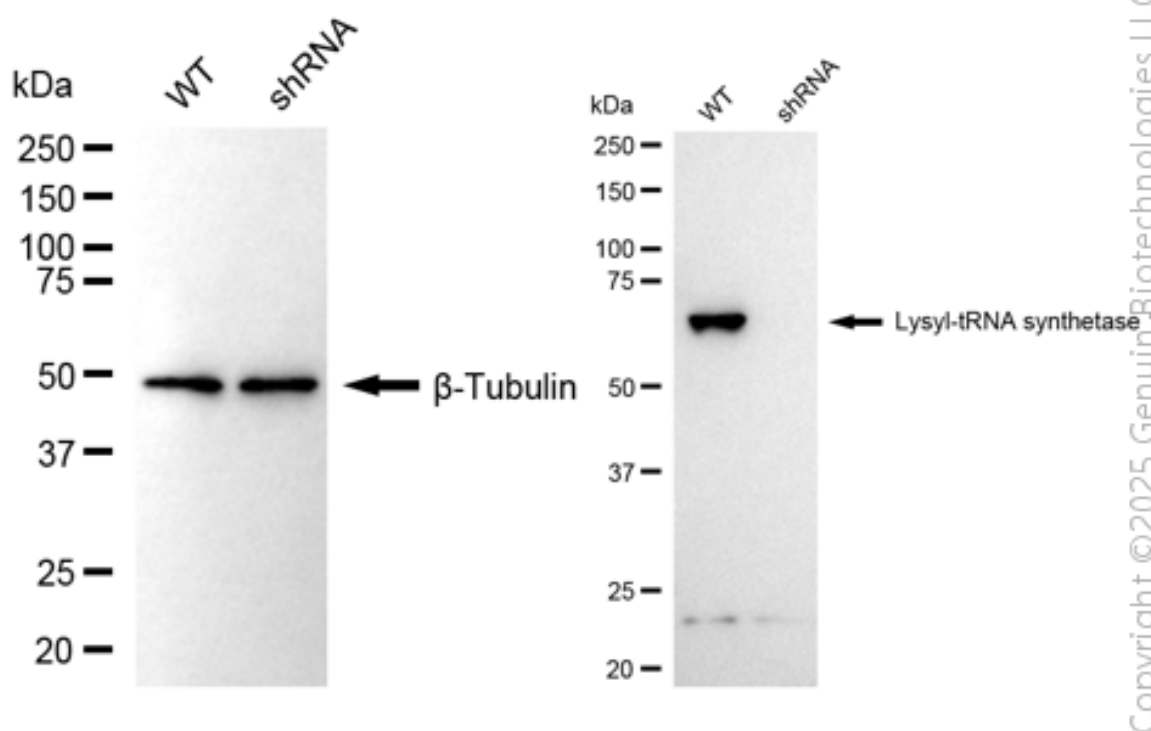
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Genotype	Ct Value
Wild-Type	22.93
Knock-Down	25.02
$\Delta$ Ct (CtKD-CtWT)	2.09
% mRNA Reduction	77%

RT-qPCR analysis. HeLa cells were infected with KARS1-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:  $(1 - 1/2^{\Delta\text{Ct}}) \times 100\%$ .



Western blotting analysis. KARS1 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 against KARS1 and  $\beta$ -Tubulin, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQ™ ECL Substrate Kit.