

# Human SMAD1 Knockdown Cell Line (WB-Validated)



**Catalog #: C62629**

## Aliases

SMAD1; SMAD Family Member 1; MADR1; JV4-1; MADH1; Mothers Against Decapentaplegic Homolog 1; Mothers Against DPP Homolog 1; Mad-Related Protein 1; BSP-1; BSP1; MAD, Mothers Against Decapentaplegic Homolog 1 (Drosophila); Transforming Growth Factor-Beta Signaling Protein 1; Transforming Growth Factor-Beta-Signaling Protein 1; SMAD, Mothers Against DPP Homolog 1 (Drosophila); MAD, Mothers Against Decapentaplegic Homolog 1; SMAD, Mothers Against DPP Homolog 1; TGF-Beta Signaling Protein 1; MAD Homolog 1; SMAD 1; HSMAD1; Smad1; JV41

## Background

Gene Name: SMAD1

NCBI Gene Entry: [4086](#)

## Storage

Store at liquid nitrogen for 1 year.

## Kit Components

1. Human SMAD1 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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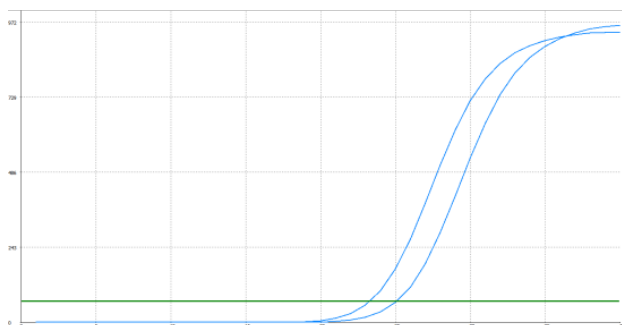
### ORDERS

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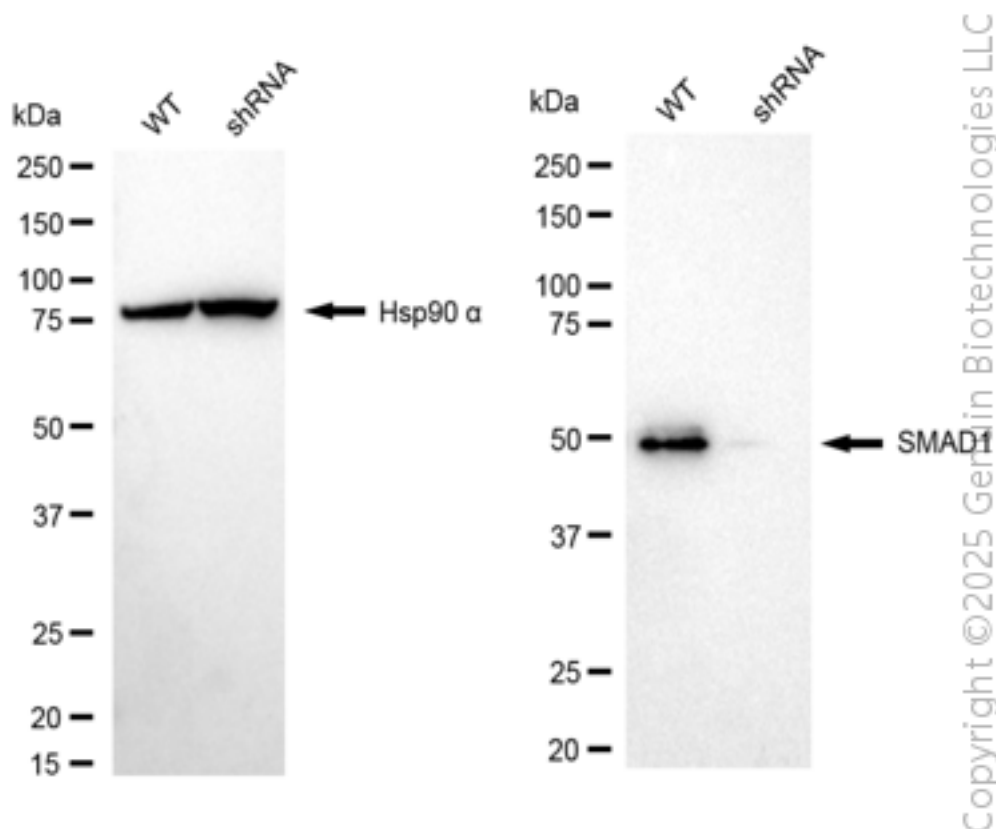
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Genotype	Ct Value
Wild-Type	23.25
Knock-Down	25.07
$\Delta Ct$ (CtKD-CtWT)	1.82
% mRNA Reduction	72%

RT-qPCR analysis. HeLa cells were infected with SMAD1-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:  $(1 - 1/2^{\Delta Ct}) \times 100\%$ .



Western blotting analysis. SMAD1 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 SMAD1 and Hsp90  $\alpha$ , respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed

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## **Human SMAD1 Knockdown Cell Line (WB-Validated)**

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using FeQ™ ECL Substrate Kit.

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