

# Human SMAD5 Knockdown Cell Line (WB-Validated)



**Catalog #: C61516**

## Aliases

SMAD5; SMAD Family Member 5; JV5-1; MADH5; Mothers Against Decapentaplegic Homolog 5; DWFC; MAD, Mothers Against Decapentaplegic Homolog 5 (Drosophila); Mothers Against Decapentaplegic, Drosophila, Homolog Of, 5; SMAD, Mothers Against DPP Homolog 5 (Drosophila); MAD, Mothers Against Decapentaplegic Homolog 5; SMAD, Mothers Against DPP Homolog 5; SMA- And MAD-Related Protein 5; Mothers Against DPP Homolog 5; MAD Homolog 5; SMAD 5; HSmad5; Smad5; Dwfc

## Background

Gene Name: SMAD5

NCBI Gene Entry: [4090](#)

## Storage

Store at liquid nitrogen for 1 year.

## Kit Components

1. Human SMAD5 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

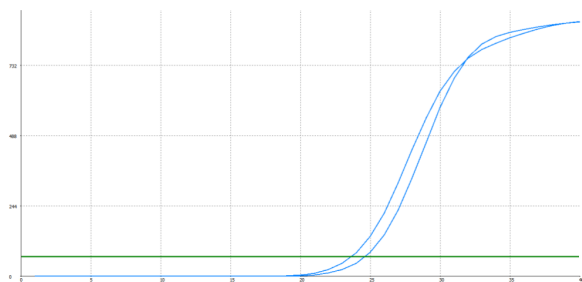
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Genotype	Ct Value
Wild-Type	23.50
Knock-Down	24.44
$\Delta Ct (Ct_{KD}-Ct_{WT})$	0.94
% mRNA Reduction	↓ 48%

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RT-qPCR analysis. HeLa cells were infected with SMAD5-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:  $(1-1/2^{\Delta Ct}) \times 100\%$ .

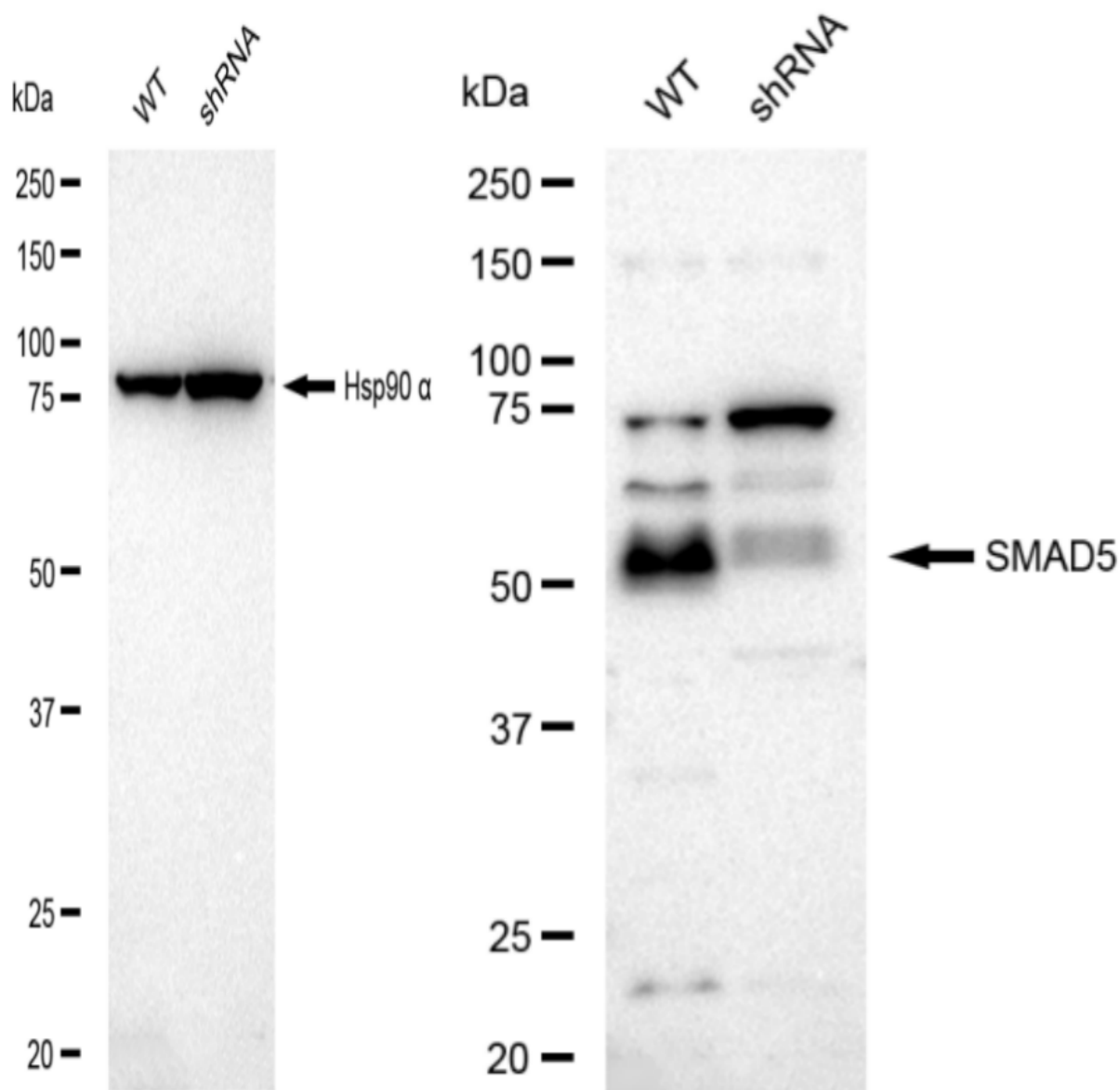
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Western blotting analysis. SMAD5 protein expression in wild-type (WT) and shRNA knockdown (KD) HeLa cells was detected using Western blotting. Hsp90  $\alpha$  served as a loading control. The blots were incubated with primary antibodies (Cat#61516, 1:5,000) against SMAD5 and Hsp90  $\alpha$ , 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).