

# Human MMP14 Knockdown Cell Line (WB-Validated)



**Catalog #: C61492**

## Aliases

MMP14; Matrix Metallopeptidase 14; MT1-MMP; Matrix Metallopeptidase 14 (Membrane-Inserted); Membrane-Type-1 Matrix Metalloproteinase; Membrane Type 1 Metalloprotease; Matrix Metalloproteinase-14; EC 3.4.24.80; MT-MMP 1; MMP-14; MMP-X1; MT1MMP; MTMMP1; Matrix Metalloproteinase 14 (Membrane-Inserted); Membrane Type 1-Matrix Metalloproteinase; Membrane-Type Matrix Metalloproteinase 1; EC 3.4.24; MT-MMP; WNCHRS

## Background

Gene Name: MMP14

NCBI Gene Entry: [4323](#)

## Storage

Store at liquid nitrogen for 1 year.

## Kit Components

1. Human MMP14 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  
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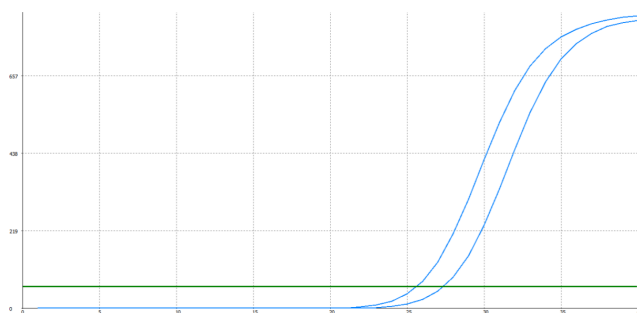
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Genotype	Ct Value
Wild-Type	25.52
Knock-Down	27.25
$\Delta\text{Ct (Ct}_{\text{KD}}\text{-Ct}_{\text{WT}})$	1.73
% mRNA Reduction	↓ 70%

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RT-qPCR analysis. HeLa cells were infected with MMP14-specific shRNA lentiviral particles, total RNA was extracted from wild-type and knockdown cells, RT-qPCR was performed using gene-specific primers.  $\Delta\text{Ct (Ct}_{\text{KD}}\text{-Ct}_{\text{WT}})$  was used to calculate mRNA reduction (%) between wild-type and knockdown cells using the following formula:  $(1-1/2^{\Delta\text{Ct}}) \times 100\%$ .

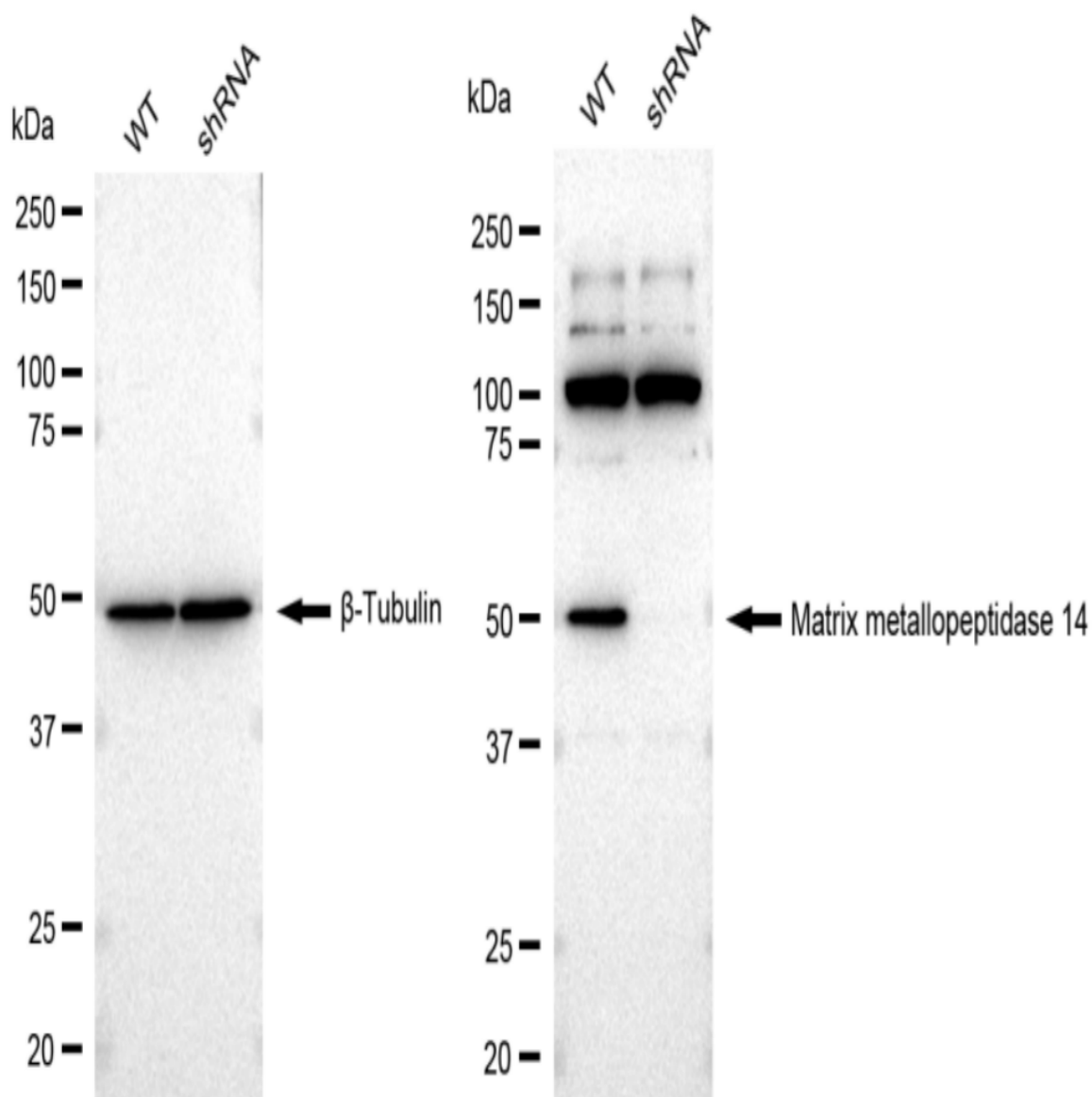
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Western blotting analysis. MMP14 protein expression in wild-type (WT) and shRNA knockdown (KD) HeLa cells was detected using Western blotting.  $\beta$ -Tubulin served as a loading control. The blots were incubated with primary antibodies (Cat#61492, 1:5,000) against MMP14 and  $\beta$ -Tubulin, 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).