## **Human MAPK3 Knockdown Cell Line (WB-Validated)**



## **Catalog #: C61484**

#### **Aliases**

MAPK3; Mitogen-Activated Protein Kinase 3; ERK1; PRKM3; Extracellular Signal-Regulated Kinase 1; Microtubule-Associated Protein 2 Kinase; Insulin-Stimulated MAP2 Kinase; EC 2.7.11.24; P44-ERK1; P44-MAPK; P44ERK1; P44MAPK; ERK-1; ERT2; Extracellular Signal-Related Kinase 1; MAP Kinase Isoform P44; MAP Kinase; EC 2.7.11; HS44KDAP; HUMKER1A; P44mapk; P44erk1; MAPK 1; MAPK

## **Background**

Gene Name: MAPK3 NCBI Gene Entry: 5595

## **Storage**

Store at liquid nitrogen for 1 year.

## **Kit Components**

- 1. Human MAPK3 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.

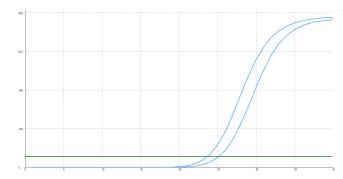
## **Instructions For Use**

This knockdown cell line should be paired with wild-type cell line for use.

**Note:** This product is for research use only.

#### Validation Data

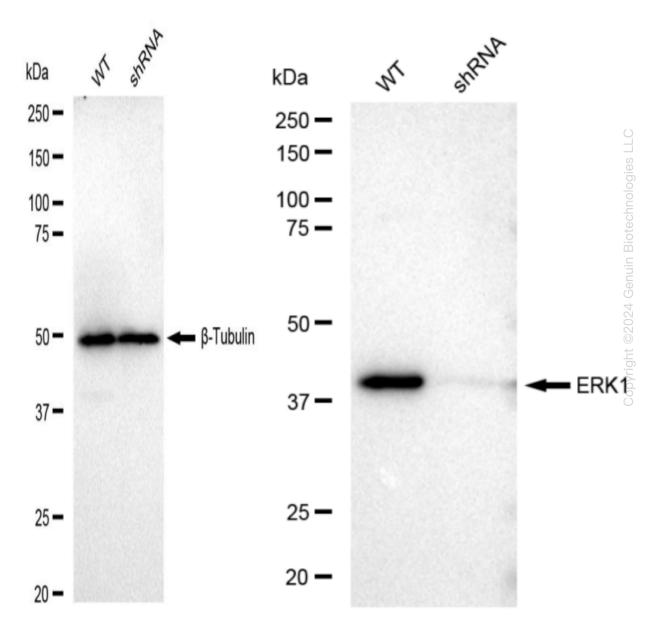
# **Human MAPK3 Knockdown Cell Line (WB-Validated)**



Genotype	Ct Value
Wild-Type	<b>23.62</b>
Knock-Down	<b>25.1 25.</b> 1
$\Delta Ct (Ct_{KD}-Ct_{WT})$	1.48
% mRNA Reduction	<b>4</b> 64%

RT-qPCR analysis. HeLa cells were infected with MAPK3-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) x 100%.

# **Human MAPK3 Knockdown Cell Line (WB-Validated)**



Western blotting analysis. MAPK3 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#61483, 1:5,000) against MAPK3 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<sup>TM</sup> ECL Substrate Kit (Cat#226).