# **Human HSPA5 Knockdown Cell Line (WB-Validated)**



**Catalog #: C61474** 

#### **Aliases**

HSPA5; Heat Shock Protein Family A (Hsp70) Member 5; GRP78; Heat Shock 70kDa Protein 5 (Glucose-Regulated Protein, 78kDa); Immunoglobulin Heavy Chain-Binding Protein; Heat Shock Protein 70 Family Protein 5; Heat Shock Protein Family A Member 5; Endoplasmic Reticulum Chaperone BiP; Glucose-Regulated Protein, 78kDa; 78 KDa Glucose-Regulated Protein; Binding-Immunoglobulin Protein; HSP70 Family Protein 5; BiP; BIP; Heat Shock 70kD Protein 5 (Glucose-Regulated Protein, 78kD); Endoplasmic Reticulum Lumenal Ca(2+)-Binding Protein Grp78; Epididymis Secretory Sperm Binding Protein Li 89n; EC 3.6.4.10; HEL-S-89n; GRP-78

## **Background**

Gene Name: HSPA5 NCBI Gene Entry: 3309

### **Storage**

Store at liquid nitrogen for 1 year.

## **Kit Components**

- 1. Human HSPA5 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.

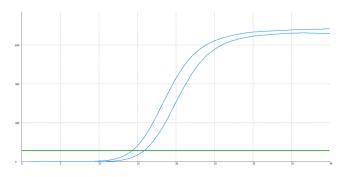
### **Instructions For Use**

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

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

#### Validation Data

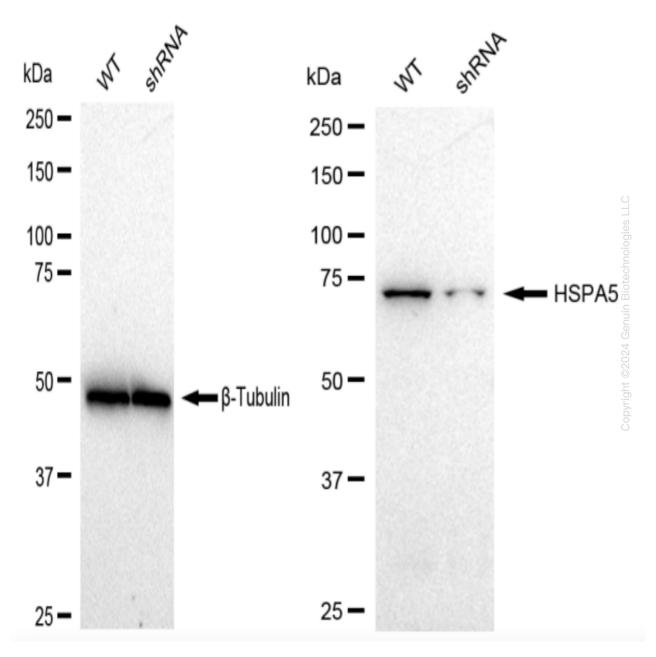
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| Genotype                      | Ct Value           |
|-------------------------------|--------------------|
| Wild-Type                     | 14.1               |
| Knock-Down                    | 15.55 <sup>4</sup> |
| $\Delta Ct (Ct_{KD}-Ct_{WT})$ | 1.45 ng            |
| % mRNA Reduction              | <b>↓</b> 63%       |

RT-qPCR analysis. 293T cells were infected with HSPA5-specific shRNA lentiviral particles, total RNA was extracted from wild-type and knockdown cells, RT-qPCR was performed using genespecific 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 HSPA5 Knockdown Cell Line (WB-Validated)**



Western blotting analysis. HSPA5 protein expression in wild-type (WT) and shRNA knockdown (KD) 293T cells was detected using Western blotting.  $\beta$ -Tubulin served as a loading control. The blots were incubated with primary antibodies against HSPA5 and  $\beta$ -Tubulin, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQ<sup>TM</sup> ECL Substrate Kit.