# **Human CAPN1 Knockdown Cell Line (WB-Validated)**



**Catalog #: C61396** 

#### **Aliases**

CAPN1; Calpain 1; CANPL1; MuCANP; CANP; Cell ProlifeRation-Inducing Gene 30 Protein; Calcium-Activated Neutral Proteinase 1; Calpain 1, (Mu/I) Large Subunit; Calpain-1 Catalytic Subunit; Calpain-1 Large Subunit; Micromolar-Calpain; Calpain Mu-Type; EC 3.4.22.52; CANP; MuCL; Cell ProlifeRation-Inducing Protein 30; Calpain, Large Polypeptide L1; EC 3.4.22; MUCANP; CANP1; SPG76; MUCL

# **Background**

Gene Name: CAPN1 NCBI Gene Entry: 823

# **Storage**

Store at liquid nitrogen for 1 year.

# **Kit Components**

- 1. Human CAPN1 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.

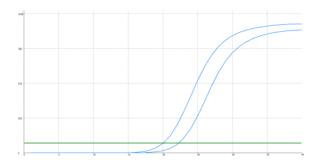
### **Instructions For Use**

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

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

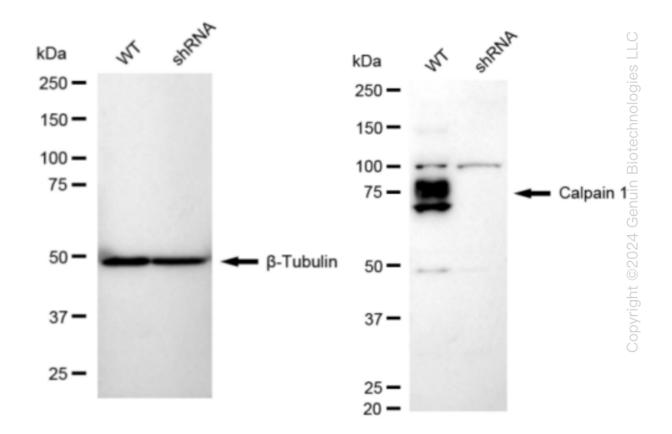
#### Validation Data

# **Human CAPN1 Knockdown Cell Line (WB-Validated)**



Genotype	Ct Value
Wild-Type	19.95
Knock-Down	22.08
$\Delta Ct (Ct_{KD}-Ct_{WT})$	2.13
% mRNA Reduction	<b>♣ 77%</b>

RT-qPCR analysis. HeLa cells were infected with CAPN1-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%.



Western blotting analysis. CAPN1 protein expression in wild-type (WT) and shRNA knockdown (KD) HeLa cells was detected using Western blotting. β-Tubulin served as a loading control. The blots were incubated with primary antibodies (Cat#61396, 1:5,000) against CAPN1 and β-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).