# **Human PRKAA1 Knockdown Cell Line (WB-Validated)**



**Catalog #: C61503** 

#### **Aliases**

PRKAA1; Protein Kinase AMP-Activated Catalytic Subunit Alpha 1; 5'-AMP-Activated Protein Kinase Catalytic Subunit Alpha-1; Protein Kinase, AMP-Activated, Alpha 1 Catalytic Subunit; Hydroxymethylglutaryl-CoA Reductase Kinase; Acetyl-CoA Carboxylase Kinase; Tau-Protein Kinase PRKAA1; AMPK Subunit Alpha-1; AMPK, Alpha, 1; ACACA Kinase; HMGCR Kinase; EC 2.7.11.1; AMPKa1; 5'-AMP-Activated Protein Kinase, Catalytic Alpha-1 Chain; AMP-Activated Protein Kinase, Catalytic, Alpha-1; AMP -Activate Kinase Alpha 1 Subunit; AMPK Alpha 1; EC 2.7.11.27; EC 2.7.11.31; EC 2.7.11.26; EC 2.7.11; AMPKA1; AMPK1; AMPK

## **Background**

Gene Name: PRKAA1 NCBI Gene Entry: 5562

### **Storage**

Store at liquid nitrogen for 1 year.

## **Kit Components**

- 1. Human PRKAA1 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.

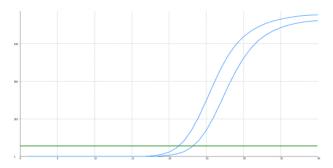
### **Instructions For Use**

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

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

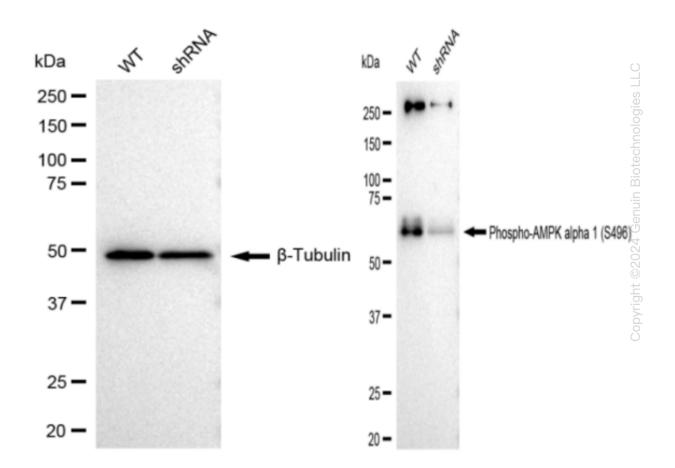
#### Validation Data

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Genotype	Ct Value
Wild-Type	21.23 gg
Knock-Down	23.08
$\Delta Ct (Ct_{KD}-Ct_{WT})$	1.85
% mRNA Reduction	<b>↓ 72%</b>

RT-qPCR analysis. HeLa cells were infected with PRKAA1-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. PRKAA1 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#61502, 1:5,000) against PRKAA1 and  $\beta$ -Tubulin , respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary

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#### PAGE 3

# **Human PRKAA1 Knockdown Cell Line (WB-Validated)**

antibody (Cat#201, 1:20,000). Images were developed using FeQ<sup>TM</sup> ECL Substrate Kit (Cat#226).

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