# **Human PRKAR2A Knockdown Cell Line (WB-Validated)**



**Catalog #: C62527** 

#### **Aliases**

PRKAR2A; Protein Kinase CAMP-Dependent Type II Regulatory Subunit Alpha; PRKAR2; Protein Kinase, CAMP-Dependent, Regulatory Subunit Type II Alpha; CAMP-Dependent Protein Kinase Type II-Alpha Regulatory Subunit; PKR2; Protein Kinase, CAMP-Dependent, Regulatory, Type II, Alpha; CAMP-Dependent Protein Kinase Regulatory Subunit RII Alpha; Protein Kinase A, RII-Alpha Subunit

# **Background**

Gene Name: PRKAR2A NCBI Gene Entry: 5576

## **Storage**

Store at liquid nitrogen for 1 year.

# **Kit Components**

- 1. Human PRKAR2A 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.

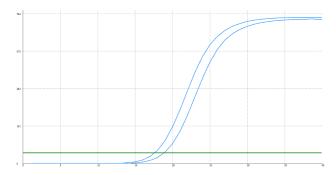
### **Instructions For Use**

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

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

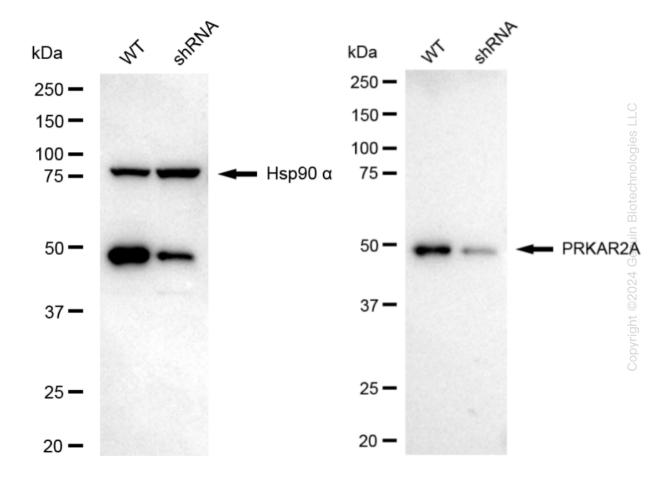
#### Validation Data

# **Human PRKAR2A Knockdown Cell Line (WB-Validated)**



Genotype	Ct Value
Wild-Type	17.55
Knock-Down	18.83
$\Delta$ Ct (Ct <sub>KD</sub> -Ct <sub>WT</sub> )	1.28
% mRNA Reduction	<b>↓</b> 59%

RT-qPCR analysis. HeLa cells were infected with PRKAR2A-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. PRKAR2A protein expression in wild-type (WT) and shRNA knockdown (KD) HeLa cells was detected using Western blotting. Hsp90  $\alpha$  served as a loading control. The blots were incubated with primary antibodies against PRKAR2A and Hsp90  $\alpha$ , respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQ<sup>TM</sup> ECL Substrate Kit.