

## Human AK4 Knockdown Cell Line (WB-Validated)



**Catalog #: C61885**

### Aliases

AK4; Adenylate Kinase 4; AK3L1; AK3; Adenylate Kinase 4, Mitochondrial; Adenylate Kinase 3-Like 1; AK 4; GTP:AMP Phosphotransferase AK4, Mitochondrial; Adenylate Kinase Isoenzyme 4, Mitochondrial; Epididymis Secretory Sperm Binding Protein; Nucleoside-Triphosphate-Adenylate Kinase; Mitochondrial Adenylate Kinase-3; GTP:AMP Phosphotransferase AK4; ATP-AMP Transphosphorylase; Adenylate Kinase 3-Like; Adenylate Kinase 3; EC 2.7.4.10; EC 2.7.4.6; EC 2.7.4.3; EC 2.7.4; AK3L2

### Background

Gene Name: AK4

NCBI Gene Entry: [205](#)

### Storage

Store at liquid nitrogen for 1 year.

### Kit Components

1. Human AK4 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

---

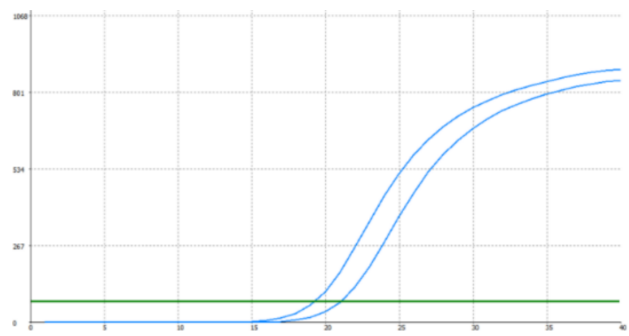
#### SUPPORT

SUPPORT@GENUINBIOTECH.COM  
TEL: +1-540-855-7041

#### ORDERS

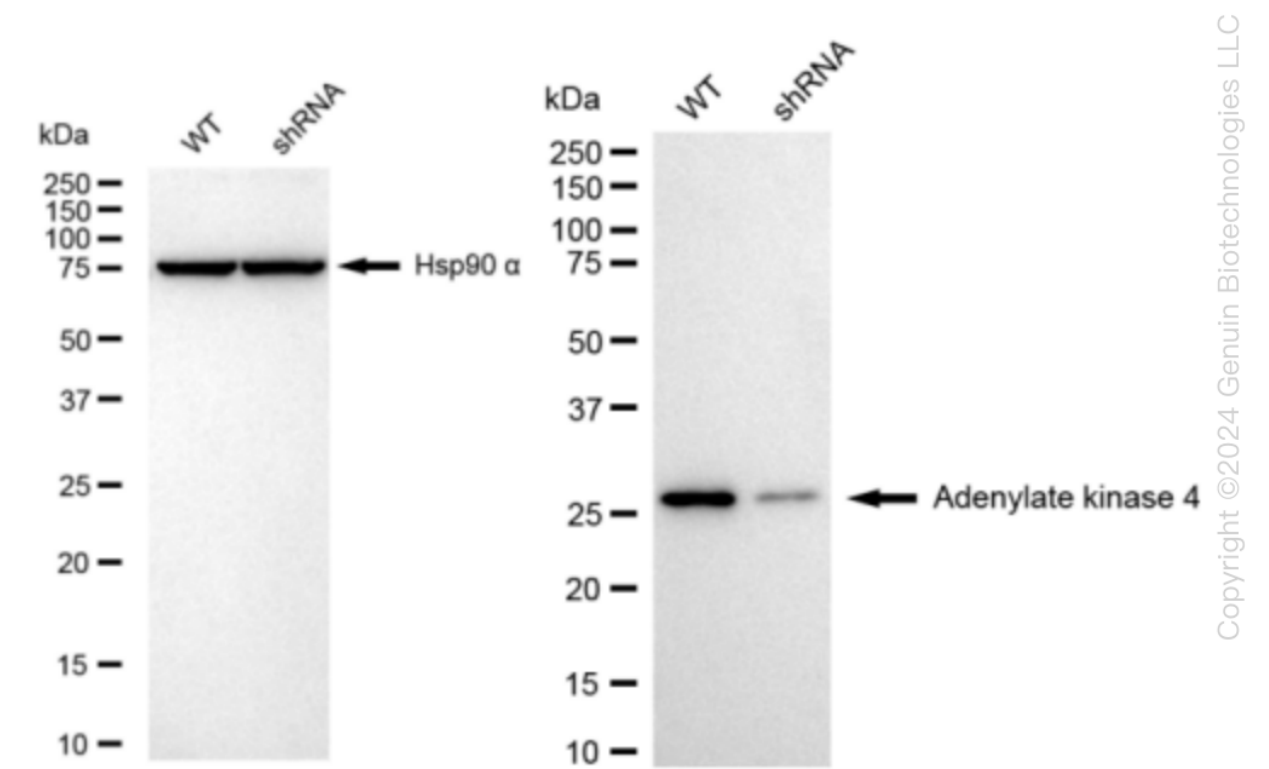
SALES@GENUINBIOTECH.COM  
FAX: +1-540-855-7041

[WWW.GENUINBIOTECH.COM](http://WWW.GENUINBIOTECH.COM)



Genotype	Ct Value
Wild-Type	19.05
Knock-Down	20.69
$\Delta Ct (Ct_{KD}-Ct_{WT})$	1.64
% mRNA Reduction	↓ 68%

RT-qPCR analysis. HeLa cells were infected with AK4-specific shRNA lentiviral particles, total RNA was extracted from wild-type and knockdown cells, RT-qPCR was performed using gene-specific primers.  $\Delta Ct (Ct_{KD}-Ct_{WT})$  was used to calculate mRNA reduction (%) between wild-type and knockdown cells using the following formula:  $(1-1/2^{\Delta Ct}) \times 100\%$ .



Western blotting analysis. AK4 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 (Cat#61885, 1:5,000) against AK4 and Hsp90  $\alpha$ , respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000). Images were developed using FeQ™ ECL Substrate Kit (Cat#226).