

# Human PAICS Knockdown Cell Line (WB-Validated)



**Catalog #: C64841**

## Aliases

PAICS; Phosphoribosylaminoimidazole Carboxylase And Phosphoribosylaminoimidazolesuccinocarboxamide Synthase; ADE2H1; PAIS; Bifunctional Phosphoribosylaminoimidazole Carboxylase/Phosphoribosylaminoimidazole Succinocarboxamide Synthetase; Phosphoribosylaminoimidazole Carboxylase, Phosphoribosylaminoimidazole Succinocarboxamide Synthetase; ADE2; Phosphoribosylaminoimidazole Carboxylase; Phosphoribosylaminoimidazolesuccinocarboxamide Synthase; Multifunctional Protein ADE2H1; Multifunctional Protein ADE2; SAICAR Synthetase; AIR Carboxylase; PAICSD; AIRC

## Background

Gene Name: PAICS

NCBI Gene Entry: [10606](#)

## Storage

Store at liquid nitrogen for 1 year.

## Kit Components

1. Human PAICS 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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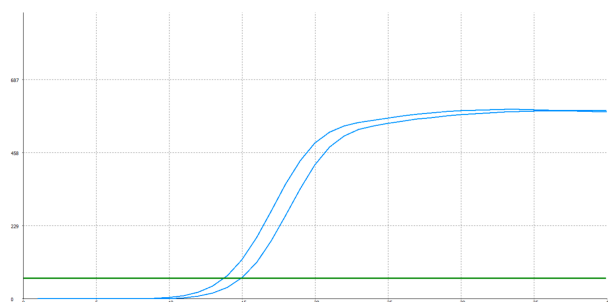
### SUPPORT

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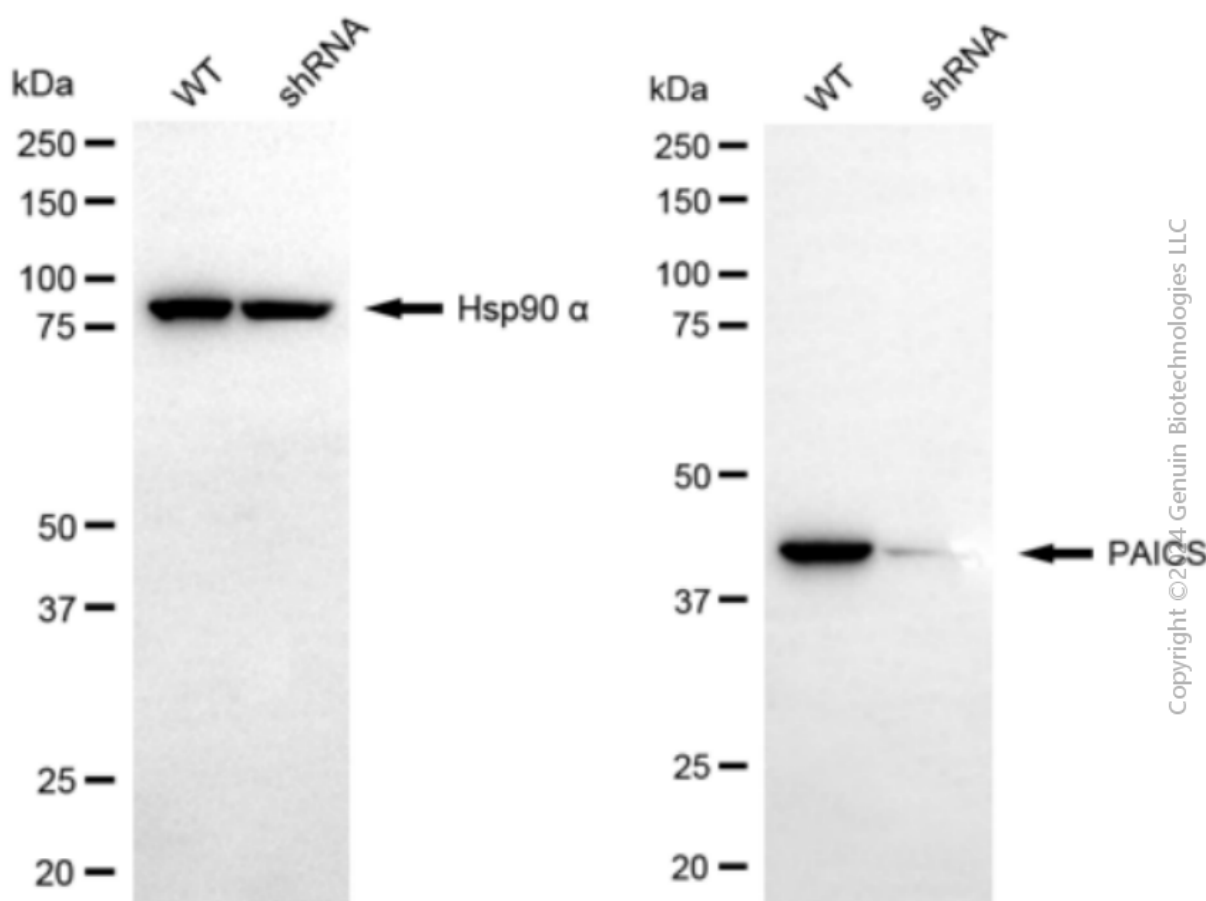
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Genotype	Ct Value
Wild-Type	13.07
Knock-Down	14.20
$\Delta Ct (Ct_{KD} - Ct_{WT})$	1.13
% mRNA Reduction	↓ 54%

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RT-qPCR analysis. HeLa cells were infected with PAICS-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:  $(1 - 1/2^{\Delta Ct}) \times 100\%$ .



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Western blotting analysis. PAICS 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 PAICS and Hsp90  $\alpha$ , respectively, followed by incubating with HRP-conjugated goat anti-mouse secondary antibody. Images were developed using FeQ™ ECL Substrate Kit.

