Human CDK2 Knockdown Cell Line (WB-Validated)



Catalog #: C4124

Aliases

CDK2; Cyclin Dependent Kinase 2; Cell Division Protein Kinase; Cyclin-Dependent Kinase; P33 Protein Kinase; EC 2.7.11.22; CDKN2; Cdc2-Related Protein Kinase; P33(CDK2); EC 2.7.11

Background

Gene Name: CDK2 NCBI Gene Entry: 1017

Storage

Store at liquid nitrogen for 1 year.

Kit Components

- 1. Human CDK2 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.

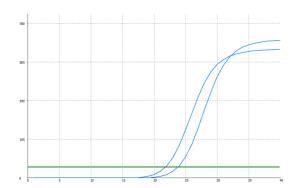
Instructions For Use

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

Note: This product is for research use only.

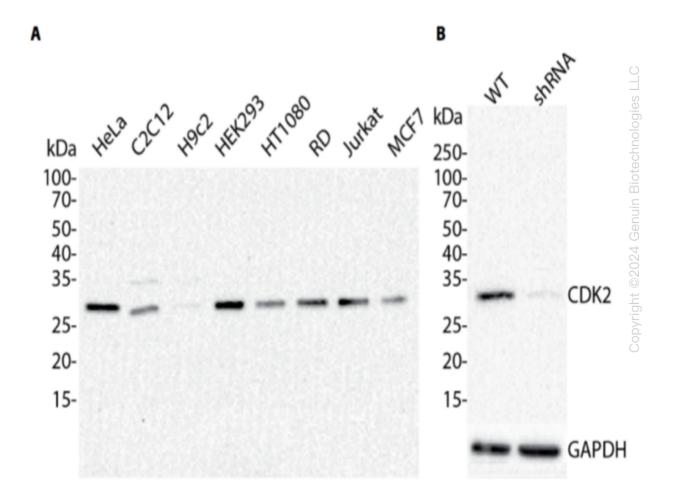
Validation Data

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Genotype	Ct Value
Wild-Type	21.49
Knock-Down	23.58
ΔCt (Ct_{KD} - Ct_{WT})	2.09
% mRNA Reduction	↓77%

RT-qPCR analysis. HeLa cells were infected with CDK2-specific shRNA lentiviral particles, total RNA was extracted from wild-type and knockdown cells, RT-qPCR was performed using gene-specific primers. Δ 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%.



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Western blotting analysis. CDK2 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#61227, 1:5,000) against CDK2 and β-Tubulin, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000). Images were developed using FeQTM ECL Substrate Kit (Cat#226).