Human ALKBH1 Knockdown Cell Line (WB-Validated)



Catalog #: C69441

Aliases

ALKBH1; AlkB Homolog 1, Histone H2A Dioxygenase; ABH; ALKBH; HABH; Alpha-KetoglutaRate-Dependent Dioxygenase ABH1; Alkylated DNA Repair Protein AlkB Homolog 1; DNA N6-Methyl Adenine Demethylase ALKBH1; MRNA N(3)-Methylcytidine Demethylase; DNA Oxidative Demethylase ALKBH1; Nucleic Acid Dioxygenase ALKBH1; DNA 6mA Demethylase; DNA Lyase ABH1; AlkB; ABH1; AlkB, Alkylation Repair Homolog 1 (E. Coli); AlkB, Alkylation Repair Homolog (E. Coli); TRNA N1-Methyl Adenine Demethylase; AlkB, Alkylation Repair Homolog 1; Alkylation Repair, AlkB Homolog; DNA Demethylase ALKBH1; EC 1.14.11.51; EC 1.14.11.33; EC 1.14.11.-; EC 4.2.99.18; ALKB

Background

Gene Name: ALKBH1 NCBI Gene Entry: 8846

Storage

Store at liquid nitrogen for 1 year.

Kit Components

- 1. Human ALKBH1 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.

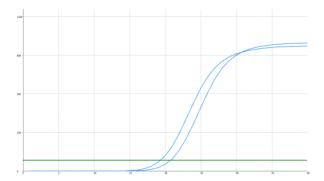
Instructions For Use

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

Note: This product is for research use only.

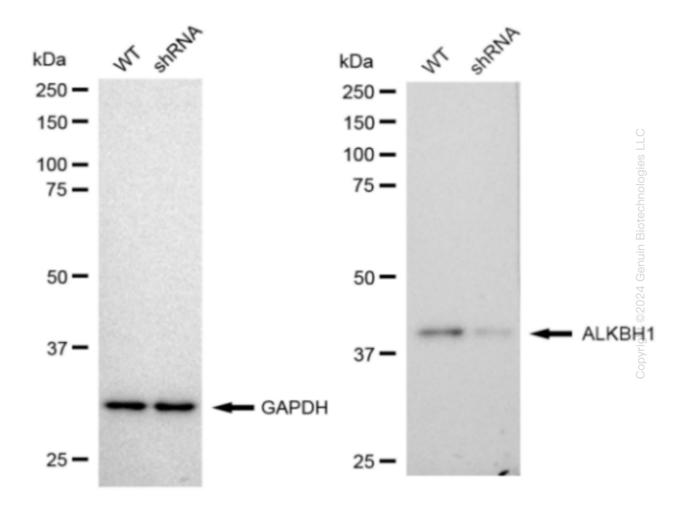
Validation Data

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Genotype	Ct Value
Wild-Type	19.02
Knock-Down	20.40
$\Delta Ct (Ct_{KD}-Ct_{WT})$	1.38
% mRNA Reduction	↓ 62%

RT-qPCR analysis. HeLa cells were infected with ALKBH1-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%.



Western blotting analysis. ALKBH1 protein expression in wild-type (WT) and shRNA knockdown (KD) HeLa cells was detected using Western blotting. GAPDH served as a loading control. The blots were incubated with primary antibodies against ALKBH1 and GAPDH, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were

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developed using FeQ $^{\text{TM}}$ ECL Substrate Kit.