Human AKR1B1 Knockdown Cell Line (WB-Validated)

Catalog #: C63659

Aliases

AKR1B1; Aldo-Keto Reductase Family 1 Member B; AR; Aldose Reductase; ALDR1; Aldo-Keto Reductase Family 1 Member B1; EC 1.1.1.21; ALR2; Aldo-Keto Reductase Family 1, Member B1 (Aldose Reductase); Lii5-2 CTCL Tumor Antigen; Low Km Aldose Reductase; Aldehyde Reductase 1; Aldehyde Reductase; EC 1.1.1.300; EC 1.1.1.372; EC 1.1.1.54; EC 1.1.1; ADR

Background

Gene Name: AKR1B1
NCBI Gene Entry: 231

Storage

Store at liquid nitrogen for 1 year.

Kit Components

1. Human AKR1B1 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.

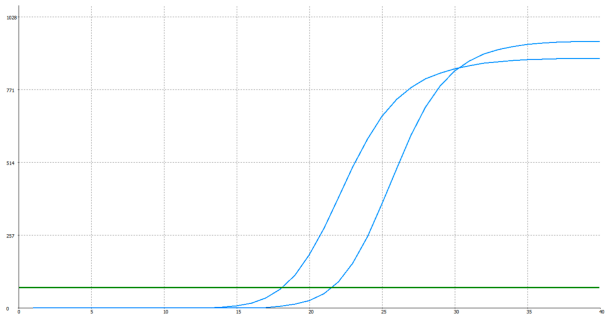
Instructions For Use

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

Note: This product is for research use only.

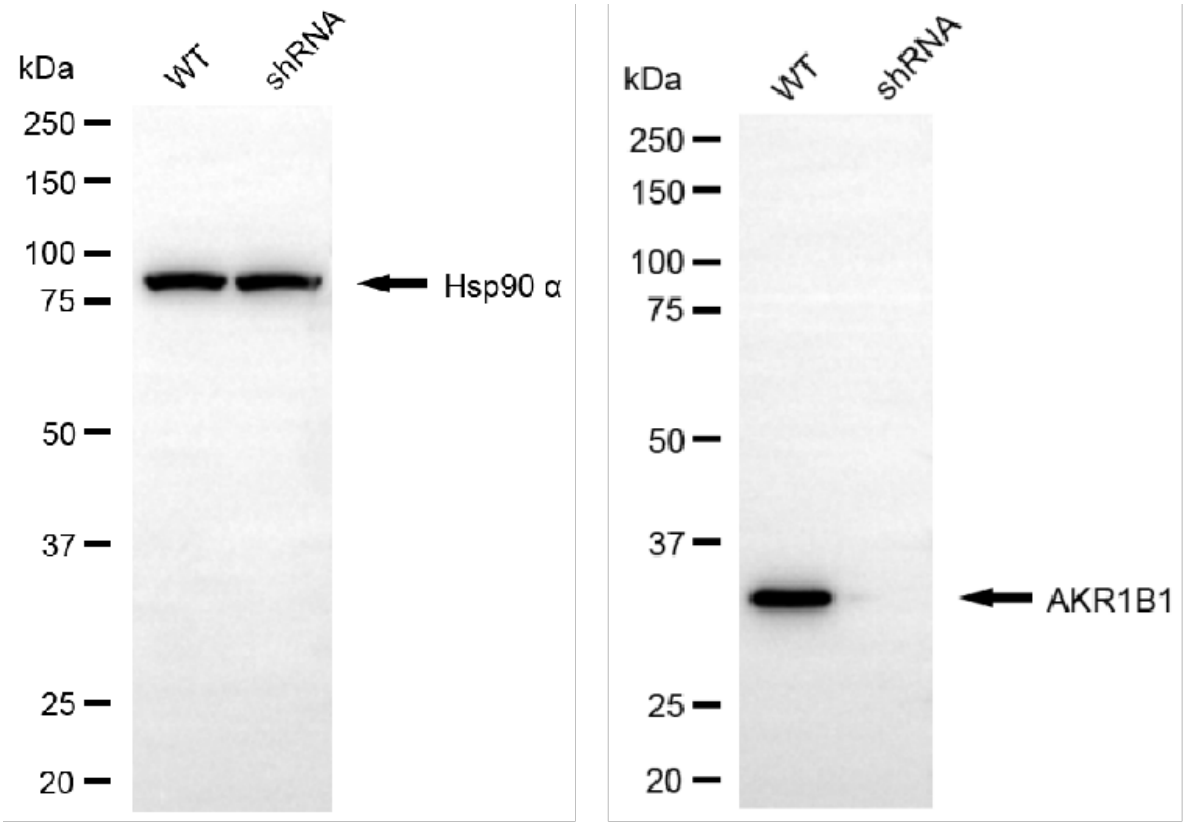
Validation Data

Human AKR1B1 Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	17.88
Knock-Down	21.38
$\Delta Ct\ (Ct_{KD}\text{-}Ct_{WT})$	3.50
% mRNA Reduction	⬇ 91%

RT-qPCR analysis. HeLa cells were infected with AKR1B1-specific shRNA lentiviral particles, total RNA was extracted from wild-type and knockdown cells, RT-qPCR was performed using gene-specific primers. ΔCt (CtKD-CtWT) was used to calculate mRNA reduction (%) between wild-type and knockdown cells using the following formula: (1-1/2ΔCt) x 100%.



Western blotting analysis. AKR1B1 protein expression in wild-type (WT) and shRNA knockdown (KD) HeLa cells was detected using Western blotting. Hsp90 α served as a loading control. The blots were incubated with primary antibodies against AKR1B1 and Hsp90 α, respectively, followed by incubating with HRP-conjugated goat anti-mouse secondary antibody. Images were developed using FeQ™ ECL Substrate Kit.