Human ATP2A2 Knockdown Cell Line (WB-Validated)



Catalog #: C61393

Aliases

ATP2A2; ATPase Sarcoplasmic/Endoplasmic Reticulum Ca2+ Transporting 2; SERCA2; Sarcoplasmic/Endoplasmic Reticulum Calcium ATPase 2; Calcium Pump 2; ATP2B; Endoplasmic Reticulum Class 1/2 Ca(2+) ATPase; SR Ca(2+)-ATPase; DAR; Calcium-Transporting ATPase Sarcoplasmic Reticulum Type, Slow Twitch Skeletal Muscle Isoform; ATPase, Ca++ Transporting, Cardiac Muscle, Slow Twitch 2; ATPase Ca++ Transporting Cardiac Muscle Slow Twitch 2; ATPase, Ca++ Dependent, Slow-Twitch, Cardiac Muscle-2; Cardiac Ca2+ ATPase; EC 7.2.2.10; EC 3.6.3.8; EC 3.6.3; DD

Background

Gene Name: ATP2A2 NCBI Gene Entry: 488

Storage

Store at liquid nitrogen for 1 year.

Kit Components

- 1. Human ATP2A2 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.

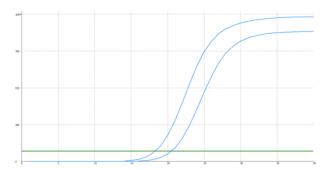
Instructions For Use

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

Note: This product is for research use only.

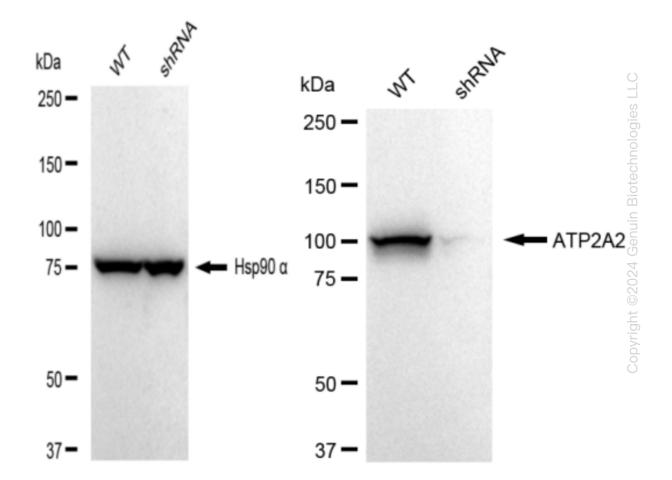
Validation Data

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Genotype	Ct Value
Wild-Type	18.28
Knock-Down	20.32
$\Delta Ct (Ct_{KD}-Ct_{WT})$	2.04
% mRNA Reduction	↓ 76 %

RT-qPCR analysis. HeLa cells were infected with ATP2A2-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. ATP2A2 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 (Cat#61393, 1:5,000) against ATP2A2 and Hsp90 α , respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody

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(Cat#201, 1:20,000). Images were developed using FeQTM ECL Substrate Kit (Cat#226).