Human MITF Knockdown Cell Line (WB-Validated)

Catalog #: C62865

Aliases

MITF; Melanocyte Inducing Transcription Factor; BHLHe32; Microphthalmia-Associated Transcription Factor; MI; Melanogenesis Associated Transcription Factor; Class E Basic Helix-Loop-Helix Protein 32; WS2A; WS2; Microphtalmia-Associated Transcription Factor; Homolog Of Mouse Microphthalmia; Waardenburg Syndrome, Type 2A; BHLHE32; COMMAD; MITF-A; CMM8

Background

Gene Name: MITF
NCBI Gene Entry: 4286

Storage

Store at liquid nitrogen for 1 year.

Kit Components

1. Human MITF 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.

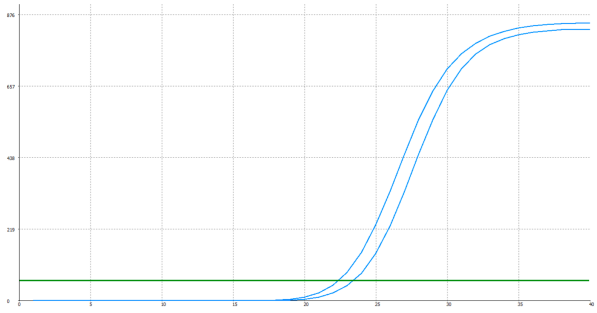
Instructions For Use

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

Note: This product is for research use only.

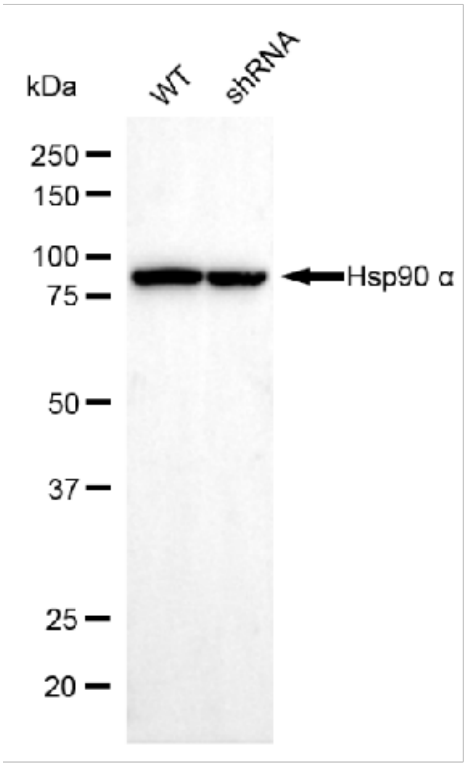
Validation Data

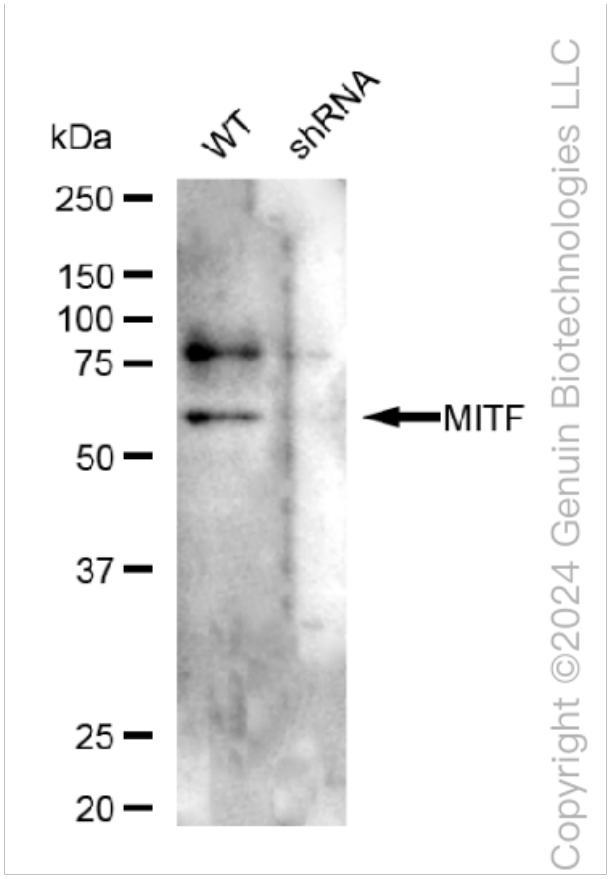
Human MITF Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	22.32
Knock-Down	23.33
$\Delta Ct\ (Ct_{KD}\text{-}Ct_{WT})$	1.01
% mRNA Reduction	⬇ 50%

RT-qPCR analysis. HeLa cells were infected with MITF-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. MITF 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 MITF and Hsp90 α, respectively, followed by incubating with HRP-conjugated goat anti-mouse secondary antibody. Images were developed using FeQ™ ECL Substrate Kit.