Human MTOR Knockdown Cell Line (WB-Validated)

Catalog #: C62298

Aliases

Mechanistic Target Of Rapamycin Kinase; RAFT1; RAPT1; Rapamycin And FKBP12 Target 1; Mammalian Target Of Rapamycin; FRAP1; FRAP2; FRAP; FK506-Binding Protein 12-Rapamycin Complex-Associated Protein 1; Mechanistic Target Of Rapamycin (Serine/Threonine Kinase); FK506 Binding Protein 12-Rapamycin Associated Protein 2; FKBP12-Rapamycin Complex-Associated Protein 1; Serine/Threonine-Protein Kinase MTOR; Rapamycin Associated Protein FRAP2; FKBP-Rapamycin Associated Protein; Mechanistic Target Of Rapamycin; Rapamycin Target Protein 1; FLJ44809; DJ576K7.1 (FK506 Binding Protein 12-Rapamycin Associated Protein 1); FK506 Binding Protein 12-Rapamycin Associated Protein 1; FKBP12-Rapamycin Complex-Associated Protein; Rapamycin Target Protein; EC 2.7.11.1; MTOR; SKS

Background

Gene Name: MTOR
NCBI Gene Entry: 2475

Storage

Store at liquid nitrogen for 1 year.

Kit Components

1. Human MTOR 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.

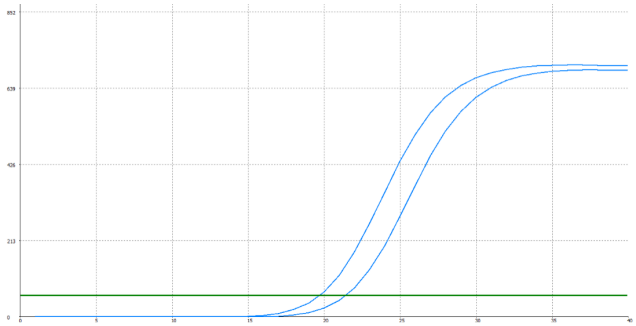
Instructions For Use

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

Note: This product is for research use only.

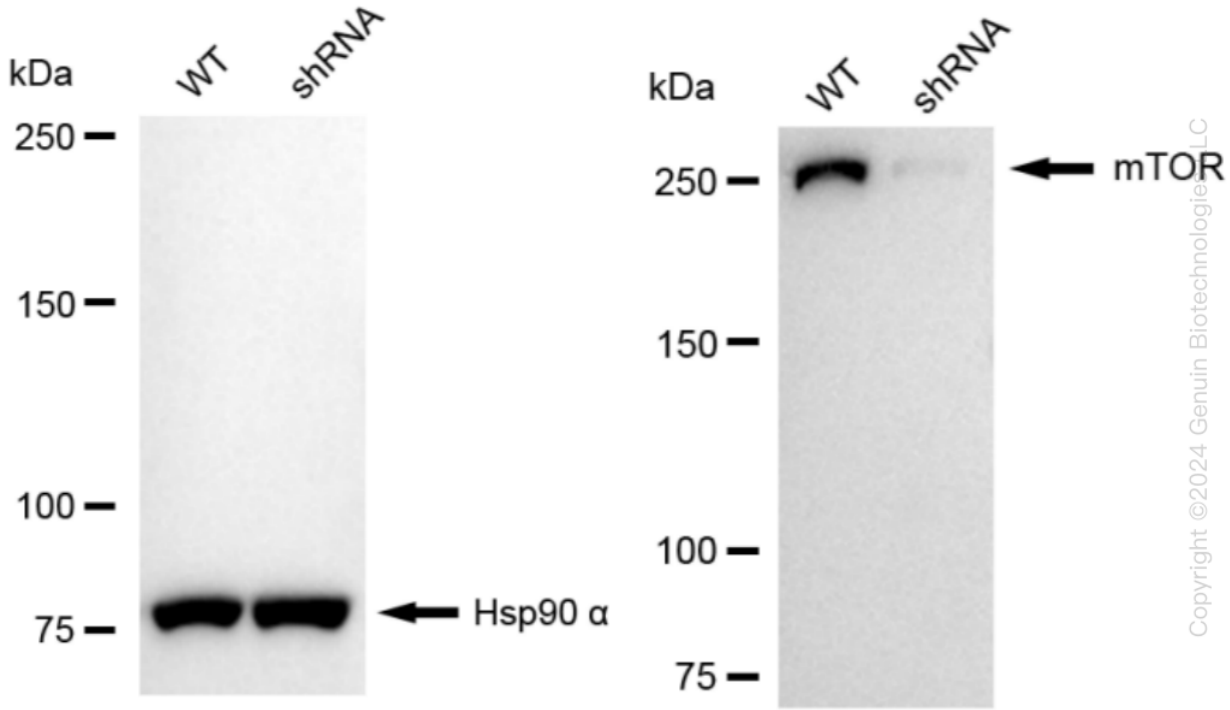
Human MTOR Knockdown Cell Line (WB-Validated)

Validation Data



Genotype	Ct Value
Wild-Type	19.36
Knock-Down	21.09
ΔCt (Ct_{KD}-Ct_{WT})	1.73
% mRNA Reduction	⬇ 70%

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