Human RPS6KA1 Knockdown Cell Line (WB-Validated)

Catalog #: C61167

Aliases

RPS6KA1; Ribosomal Protein S6 Kinase A1; RSK1; MAPKAPK1; HU-1; MAP Kinase-Activated Protein Kinase 1a; 90 KDa Ribosomal Protein S6 Kinase 1; Ribosomal Protein S6 Kinase Alpha-1; MAPK-Activated Protein Kinase 1a; Ribosomal S6 Kinase 1; MAPKAP Kinase 1a; EC 2.7.11.1; MAPKAPK-1a; MAPKAPK1A; P90-RSK 1; P90RSK1; P90Rsk; P90S6K; RSK-1; DJ590P13.1 (Ribosomal Protein S6 Kinase, 90kD, Polypeptide 1); Ribosomal Protein S6 Kinase, 90kDa, Polypeptide 1; Ribosomal Protein S6 Kinase, 90kD, Polypeptide 1; S6K-Alpha 1; S6K-Alpha-1; EC 2.7.11; RSK(□P90RSK)

Background

Gene Name: RPS6KA1
NCBI Gene Entry: 6195

Storage

Store at liquid nitrogen for 1 year.

Kit Components

1. Human RPS6KA1 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.

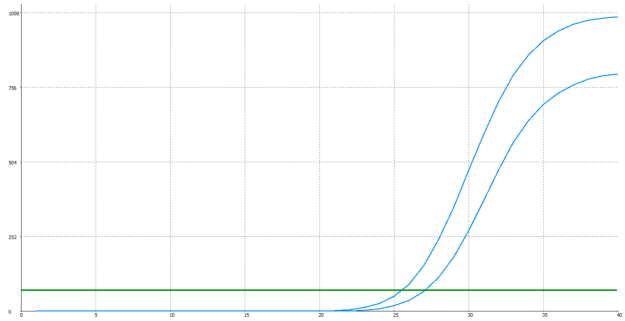
Instructions For Use

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

Note: This product is for research use only.

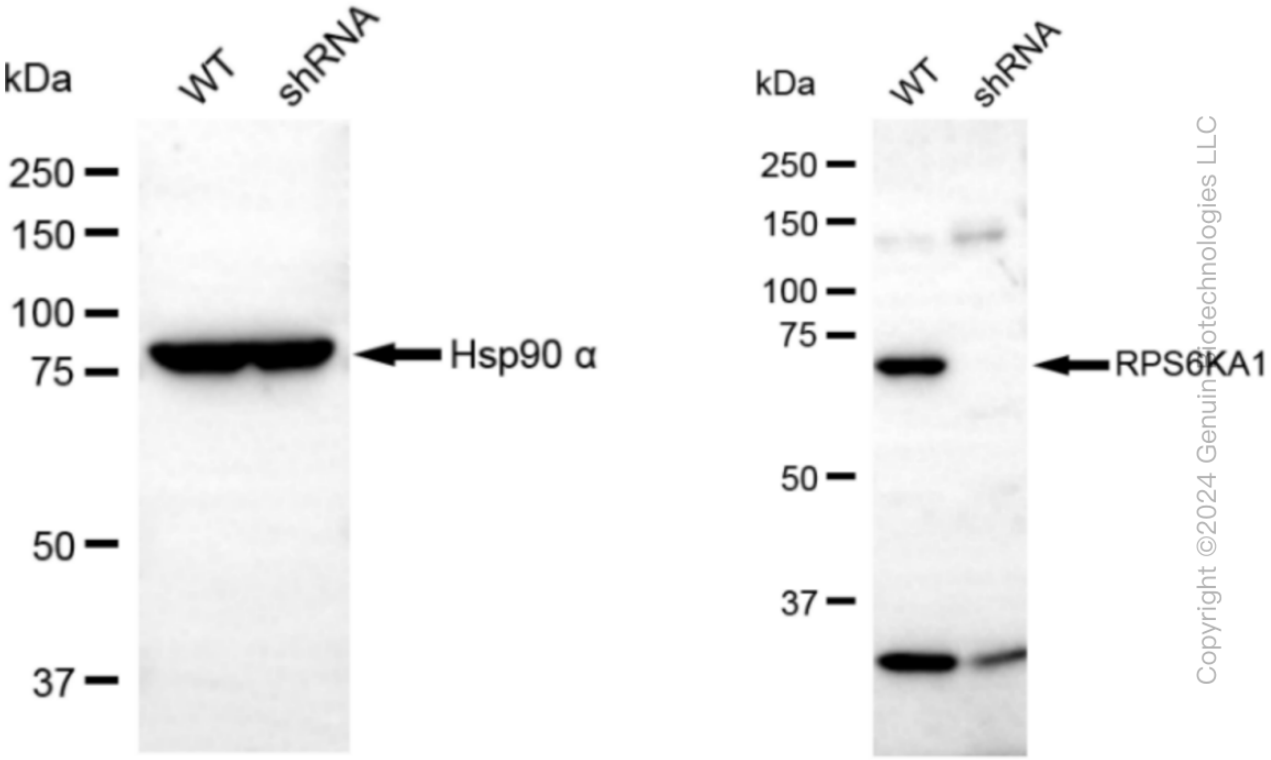
Validation Data

Human RPS6KA1 Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	25.49
Knock-Down	26.69
ΔCt (Ct_{KD}-Ct_{WT})	1.20
% mRNA Reduction	⬇ 56%

RT-qPCR analysis. HeLa cells were infected with RPS6KA1-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. RPS6KA1 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 RPS6KA1 and Hsp90 α, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQ™ ECL Substrate Kit.