# Human RAC3 Knockdown Cell Line (WB-Validated)

# Catalog #: C61199

## Aliases

RAC3; Rac Family Small GTPase 3; Ras-Related C3 Botulinum Toxin SubstRate 3 (Rho Family, Small GTP Binding Protein Rac3); Ras-Related C3 Botulinum Toxin SubstRate 3; P21-Rac3; Rho Family, Small GTP Binding Protein Rac3; EC 3.6.5.2

## Background

Gene Name: RAC3
NCBI Gene Entry: 5881

## Storage

Store at liquid nitrogen for 1 year.

## Kit Components

1. Human RAC3 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.

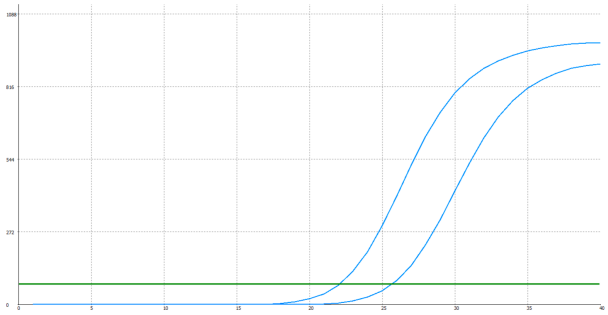
## Instructions For Use

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

**Note:** This product is for research use only.

### Validation Data

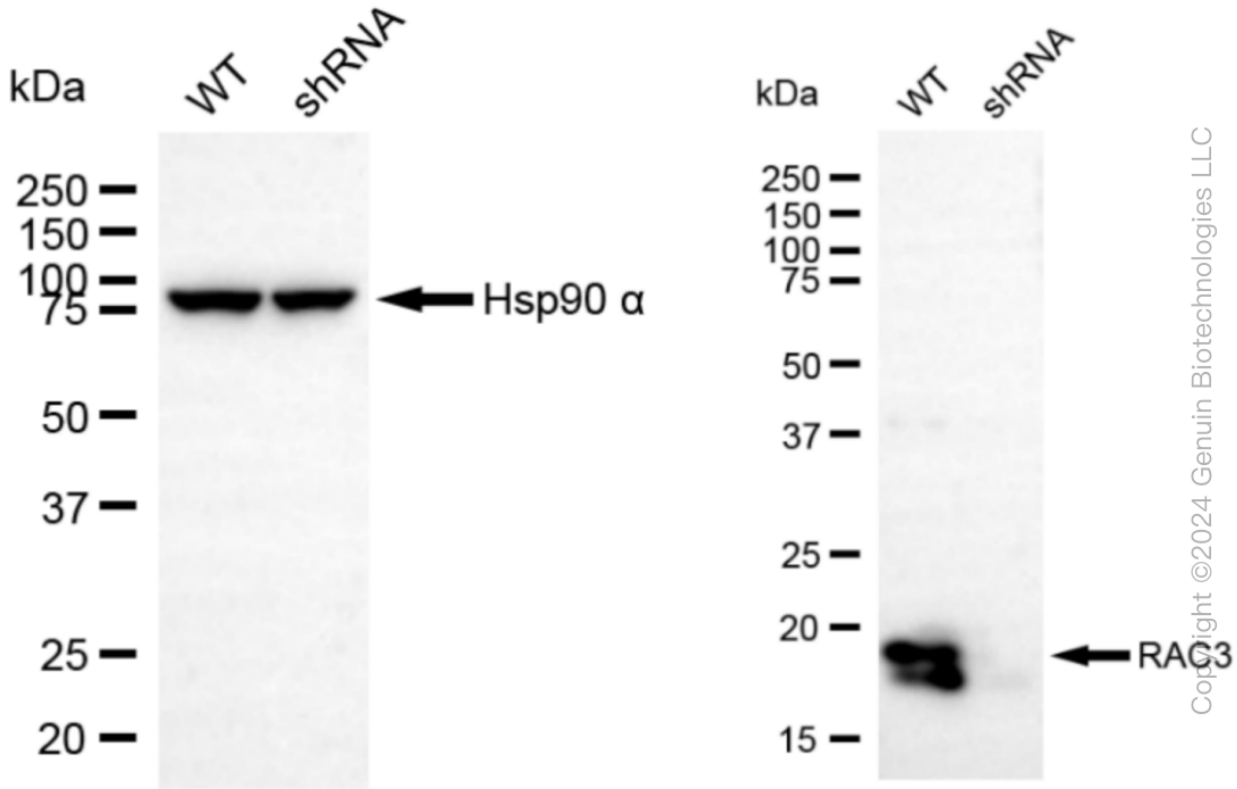
# Human RAC3 Knockdown Cell Line (WB-Validated)



| Genotype | Ct Value |
|---|---|
| Wild-Type | 21.91 |
| Knock-Down | 25.33 |
| $\Delta Ct\ (Ct_{KD}\text{-}Ct_{WT})$ | 3.42 |
| % mRNA Reduction | ⬇ 91% |



RT-qPCR analysis. HeLa cells were infected with RAC3-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. RAC3 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 RAC3 and Hsp90 α, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQ™ ECL Substrate Kit.