# Human NEK2 Knockdown Cell Line (WB-Validated)

# Catalog #: C61168

## Aliases

NEK2; NIMA Related Kinase 2; NEK2A; NLK1; PPP1R111; RP67; NIMA (Never In Mitosis Gene A)-Related Kinase 2; Protein Phosphatase 1, Regulatory Subunit 111; Serine/Threonine-Protein Kinase Nek2; NimA-Related Protein Kinase; NimA-Like Protein Kinase 1; EC 2.7.11.1; Never In Mitosis A-Related Kinase; EC 2.7.11; HsPK 21; HSPK 21; HsPK21

## Background

Gene Name: NEK2
NCBI Gene Entry: 4751

## Storage

Store at liquid nitrogen for 1 year.

## Kit Components

1. Human NEK2 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.

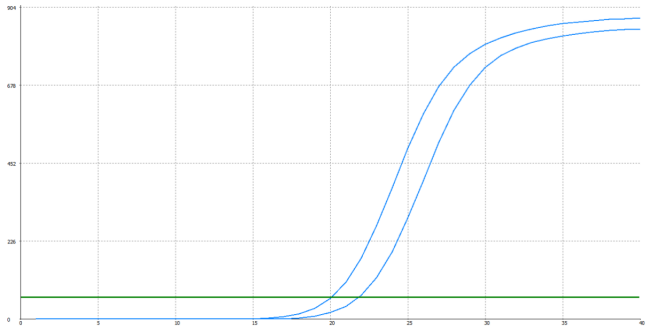
## Instructions For Use

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

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

### Validation Data

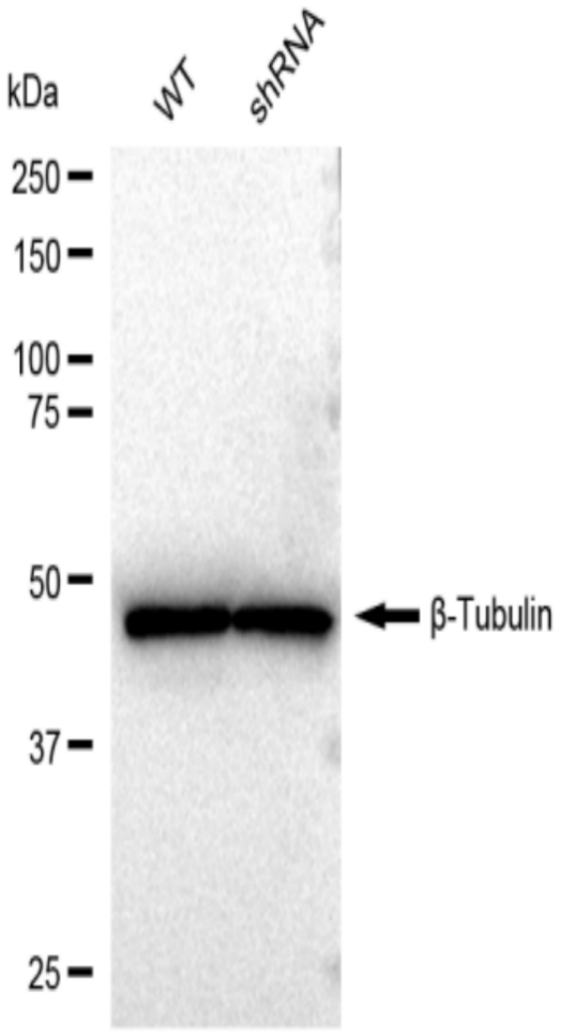
# Human NEK2 Knockdown Cell Line (WB-Validated)

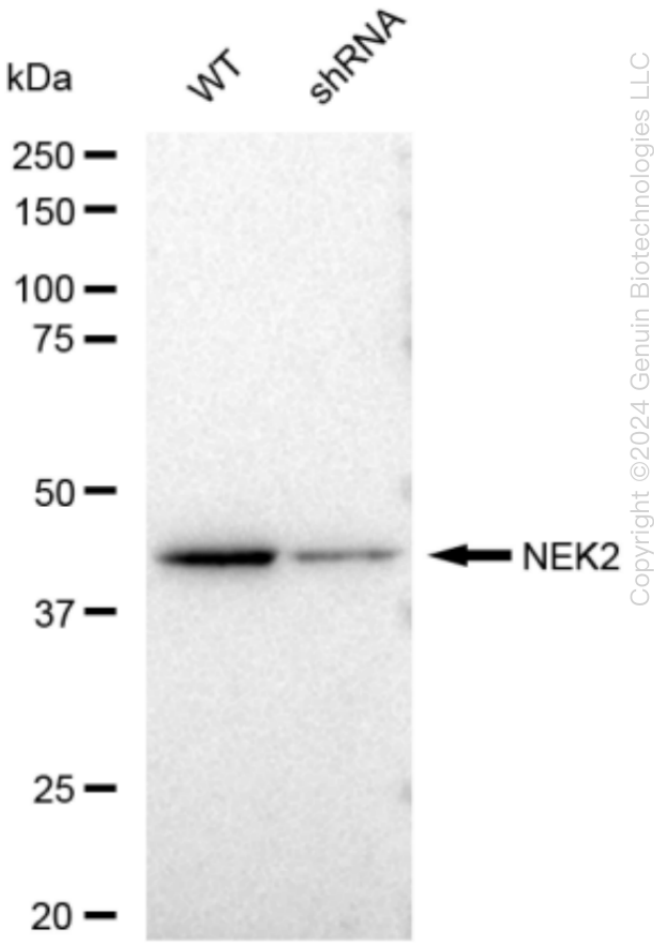


| Genotype | Ct Value |
|---|---|
| Wild-Type | 20.05 |
| Knock-Down | 21.72 |
| ΔCt ($Ct_{KD}$-$Ct_{WT}$) | 1.67 |
| % mRNA Reduction | ⬇ 69% |



RT-qPCR analysis. HeLa cells were infected with NEK2-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%.



# Human NEK2 Knockdown Cell Line (WB-Validated)

Western blotting analysis. NEK2 protein expression in wild-type (WT) and shRNA knockdown (KD) HeLa cells was detected using Western blotting. β-Tubulin served as a loading control. The blots were incubated with primary antibodies (Cat#61168, 1:5,000) against NEK2 and β-Tubulin, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000). Images were developed using FeQ™ ECL Substrate Kit (Cat#226).