

# Nek10 (N-14): sc-103069

## BACKGROUND

NIMA was originally discovered in *Aspergillus nidulans* as a protein that is necessary for entry into mitosis. Several NIMA-related mammalian proteins have since been identified. Nek10 (NIMA (never in mitosis gene a)-related kinase 10) is a 712 amino acid protein belonging to the NIMA subfamily of kinases and functions as a magnesium-dependent serine/threonine protein kinase. Kinases of the NIMA subfamily are typically involved in genotoxic stress response and DNA replication. Nek10 is expressed in brain and may contain a 14-3-3 interaction motif in its C-terminus. The gene encoding Nek10 has been localized to a region on chromosome 3 that may contribute to vulnerability to addictions. Due to alternative splicing events, three isoforms exist for Nek10.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: NEK10 (human) mapping to 3p24.1; Nek10 (mouse) mapping to 14 A2.

## SOURCE

Nek10 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Nek10 of human origin.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103069 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

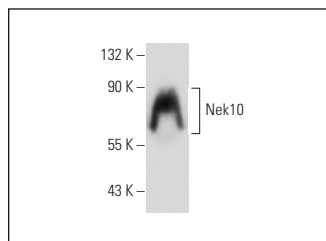
Nek10 (N-14) is recommended for detection of Nek10 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Nek family members.

Suitable for use as control antibody for Nek10 siRNA (h): sc-78343, Nek10 siRNA (m): sc-149903, Nek10 shRNA Plasmid (h): sc-78343-SH, Nek10 shRNA Plasmid (m): sc-149903-SH, Nek10 shRNA (h) Lentiviral Particles: sc-78343-V and Nek10 shRNA (m) Lentiviral Particles: sc-149903-V.

Molecular Weight of Nek10: 82 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

## DATA



Nek10 (N-14): sc-103069. Western blot analysis of Nek10 expression in Jurkat whole cell lysate.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **Nek10 (97.1): sc-100434**, our highly recommended monoclonal alternative to Nek10 (N-14).