

# NIF-1 (C-17): sc-85790

## BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. The majority of zinc-finger proteins contain a Krüppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. NIF-1 (NRC-interacting factor 1), also known as NIF2 or ZNF335 (zinc finger protein 335), is a 1,342 amino acid nuclear protein belonging to the Krüppel C<sub>2</sub>H<sub>2</sub>-type zinc-finger protein family and exists as 2 alternatively spliced isoforms. NIF-1 is highly expressed in skeletal muscle, thymus, placenta and blood and contains thirteen C<sub>2</sub>H<sub>2</sub>-type zinc fingers. NIF-1 may regulate transcriptional activation through PRIP (peroxisome proliferator-activated receptor-interacting protein), a nuclear receptor co-activator that interacts with members of the steroid hormone and thyroid hormone/retinoid receptor subfamilies in a ligand-dependent or ligand-enhanced manner. NIF-1 is phosphorylated upon DNA damage by either ATM or ATR.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ZNF335 (human) mapping to 20q13.12; Zfp335 (mouse) mapping to 2 H3.

## SOURCE

NIF-1 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of NIF-1 of human origin.

## 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-85790 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-85790 X, 100 µg/0.1 ml.

## APPLICATIONS

NIF-1 (C-17) is recommended for detection of NIF-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

NIF-1 (C-17) is also recommended for detection of NIF-1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NIF-1 siRNA (h): sc-75914, NIF-1 siRNA (m): sc-149972, NIF-1 shRNA Plasmid (h): sc-75914-SH, NIF-1 shRNA Plasmid (m): sc-149972-SH, NIF-1 shRNA (h) Lentiviral Particles: sc-75914-V and NIF-1 shRNA (m) Lentiviral Particles: sc-149972-V.

NIF-1 (C-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NIF-1: 145 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

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

## RESEARCH USE

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

## PROTOCOLS

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