SANTA CRUZ BIOTECHNOLOGY, INC.

NRIP (B-11): sc-515639

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

WD-repeats are motifs that are found in a variety of proteins and are characterized by a conserved core of 40-60 amino acids that commonly form a tertiary propeller structure. While proteins that contain WD-repeats participate in a wide range of cellular functions, they are generally involved in regulatory mechanisms concerning chromatin assembly, cell cycle control, signal transduction, RNA processing, apoptosis and vesicular trafficking. NRIP (nuclear receptor interaction protein), also known as IQWD1 (IQ motif and WD repeat-containing protein 1), MSTP055, ARCAP or PC326, is an 860 amino acid protein that localizes to the nucleus and contains one IQ domain and seven WD-repeats. Expressed in testis, skeletal muscle, prostate and heart, NRIP functions as a ligand-dependent coactivator of nuclear receptors and specifically enhances the transcriptional activity of AR (androgen receptor) and GR (glucocorticoid receptor). NRIP exists as three isoforms that are produced by alternative splicing events.

REFERENCES

1. Grad, J.M., et al. 1999. Multiple androgen response elements and a Myc consensus site in the androgen receptor (AR) coding region are involved in androgen-mediated up-regulation of AR messenger RNA. Mol. Endocrinol. 13: 1896-1911.
2. Tureci, O., et al. 2002. A novel tumour associated leucine zipper protein targeting to sites of gene transcription and splicing. Oncogene 21: 3879-3888.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 610494. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
4. Tsai, T.C., et al. 2005. NRIP, a novel nuclear receptor interaction protein, enhances the transcriptional activity of nuclear receptors. J. Biol. Chem. 280: 20000-20009.

CHROMOSOMAL LOCATION

Genetic locus: DCAF6 (human) mapping to 1q24.2; Dcaf6 (mouse) mapping to 1 H2.3.

SOURCE

NRIP (B-11) is a mouse monoclonal antibody raised against amino acids 711-880 mapping at the C-terminus of NRIP of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

NRIP (B-11) is available conjugated to agarose (sc-515639 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515639 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515639 PE), fluorescein (sc-515639 FITC), Alexa Fluor® 488 (sc-515639 AF488), Alexa Fluor® 546 (sc-515639 AF546), Alexa Fluor® 594 (sc-515639 AF594) or Alexa Fluor® 647 (sc-515639 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515639 AF680) or Alexa Fluor® 790 (sc-515639 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

NRIP (B-11) is recommended for detection of NRIP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for NRIP siRNA (h): sc-88749, NRIP siRNA (m): sc-150065, NRIP shRNA Plasmid (h): sc-88749-SH, NRIP shRNA Plasmid (m): sc-150065-SH, NRIP shRNA (h) Lentiviral Particles: sc-88749-V and NRIP shRNA (m) Lentiviral Particles: sc-150065-V.

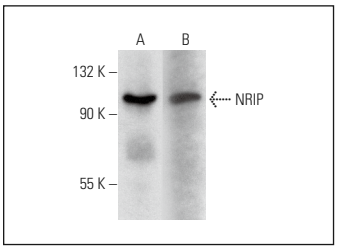
Molecular Weight of NRIP: 96 kDa.

Positive Controls: rat skeletal muscle extract: sc-364810, mouse skeletal muscle extract: sc-364250 or human skeletal muscle extract: sc-363776.

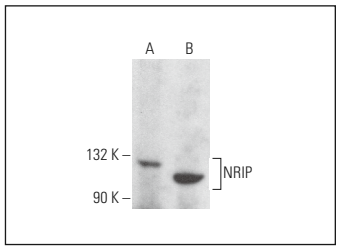
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



NRIP (B-11): sc-515639. Western blot analysis of NRIP expression in mouse skeletal muscle (**A**) and human skeletal muscle (**B**) tissue extracts.



NRIP (B-11): sc-515639. Western blot analysis of NRIP expression in human skeletal muscle (**A**) and rat skeletal muscle (**B**) tissue extracts.

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 for detailed protocols and support products.