

NCoA-3 (B-3): sc-515530

BACKGROUND

Nuclear receptors for steroids, thyroid hormones and retinoic acids are ligand-dependent transcription factors that activate transcription through specific DNA binding sites in their target genes. Several related transcriptional coactivators and corepressors have been described that work in concert with the steroid receptor family to either induce or repress transcription from hormone-responsive elements. This family includes GRIP1 (for GR interacting protein 1), also designated NCoA-2 or TIF-2; SRC-1 (for steroid receptor coactivator-1), also designated NCoA-1; and NCoA-3, also designated RAC3, ACTR, AIB-1 (for amplified in breast cancer) and p/CIP (for p300/CBP/co-integrator protein), which displays elevated expression in estrogen receptor positive ovarian and breast cancers and is required for the transcriptional activation of p300/CBP-dependent transcription factors.

REFERENCES

- Ribeiro, R.C., et al. 1995. The nuclear hormone receptor gene superfamily. *Annu. Rev. Med.* 46: 443-453.
- Onate, S.A., et al. 1995. Sequence and characterization of a coactivator for the steroid hormone receptor superfamily. *Science* 270: 1354-1357.
- Hong, H., et al. 1996. GRIP1, a novel mouse protein that serves as a transcriptional coactivator in yeast for the hormone binding domains of steroid receptors. *Proc. Natl. Acad. Sci. USA* 93: 4948-4952.
- Li, H., et al. 1997. RAC3, a steroid/nuclear receptor-associated coactivator that is related to SRC-1 and TIF2. *Proc. Natl. Acad. Sci. USA* 94: 8479-8484.
- Anzick, S.L., et al. 1997. AIB1, a steroid receptor coactivator amplified in breast and ovarian cancer. *Science* 277: 965-968.
- Torchia, J., et al. 1997. The transcriptional co-activator p/CIP binds CBP and mediates nuclear-receptor function. *Nature* 387: 677-684.

CHROMOSOMAL LOCATION

Genetic locus: NCOA3 (human) mapping to 20q13.12; Ncoa3 (mouse) mapping to 2 H3.

SOURCE

NCoA-3 (B-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1347-1371 at the C-terminus of NCoA-3 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for ChIP application, sc-515530 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-515530 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

NCoA-3 (B-3) is recommended for detection of NCoA-3 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 NCoA-3 siRNA (h): sc-29636, NCoA-3 siRNA (m): sc-29637, NCoA-3 shRNA Plasmid (h): sc-29636-SH, NCoA-3 shRNA Plasmid (m): sc-29637-SH, NCoA-3 shRNA (h) Lentiviral Particles: sc-29636-V and NCoA-3 shRNA (m) Lentiviral Particles: sc-29637-V.

NCoA-3 (B-3) X TransCruz antibody is recommended for ChIP assays.

Molecular Weight of NCoA-3: 160 kDa.

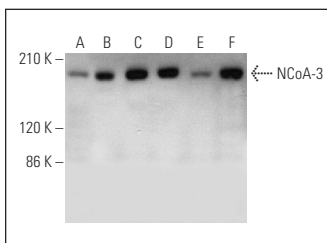
Positive Controls: MCF7 whole cell lysate: sc-2206, HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

RECOMMENDED SUPPORT REAGENTS

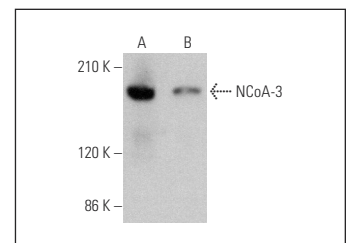
To ensure optimal results, the following support reagents are recommended:

- 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, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.
- Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
- 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



NCoA-3 (B-3): sc-515530. Western blot analysis of NCoA-3 expression in K-562 (A), MCF7 (B), HeLa (C), MIA PaCa-2 (D), A-431 (E) and Daudi (F) whole cell lysates.



NCoA-3 (B-3): sc-515530. Western blot analysis of NCoA-3 expression in T-47D (A) and HL-60 (B) whole cell lysates.

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.