

NCoA-3 (F-2): sc-5305

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 co-repressors 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 TIF2; SRC-1 (for steroid receptor coactivator-1), also designated NCoA-1; NCoA-3, also designated RAC-3, 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 coactivator 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 (F-2) is a mouse monoclonal antibody raised against amino acids 455-851 of NCoA-3 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for ChIP application, sc-5305 X, 200 µg/0.1 ml.

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.

APPLICATIONS

NCoA-3 (F-2) is recommended for detection of NCoA-3 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).

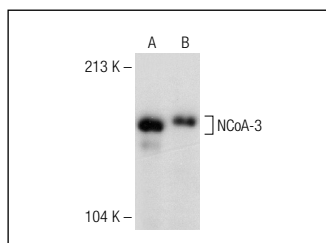
Suitable for use as control antibody for NCoA-3 siRNA (h): sc-29636, NCoA-3 siRNA (m): sc-29637, NCoA-3 shRNA Plasmid (h): sc-29636-SH, NCoA-3 shRNA Plasmid (m): sc-29637-SH, NCoA-3 shRNA (h) Lentiviral Particles: sc-29636-V and NCoA-3 shRNA (m) Lentiviral Particles: sc-29637-V.

NCoA-3 (F-2) X TransCruz antibody is recommended for ChIP assays.

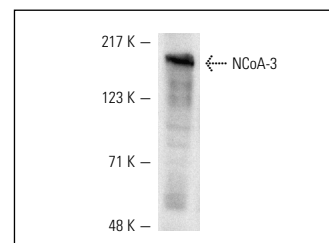
Molecular Weight of NCoA-3: 160 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa nuclear extract: sc-2120 or K-562 whole cell lysate: sc-2203.

DATA



NCoA-3 (F-2): sc-5305. Western blot analysis of NCoA-3 expression in Jurkat (A) and K-562 (B) whole cell lysates.



NCoA-3 (F-2): sc-5305. Western blot analysis of NCoA-3 expression in HeLa nuclear extract.

SELECT PRODUCT CITATIONS

- Baek, S., et al. 2002. Exchange of NCoR corepressor and TIP60 coactivator complexes links gene expression by NFκB and β-Amyloid precursor protein. *Cell* 110: 55-67.
- Perissi, V., et al. 2004. A corepressor/coactivator exchange complex required for transcriptional activation by nuclear receptors and other regulated transcription factors. *Cell* 116: 511-526.
- Bowe, D.B., et al. 2006. O-GlcNAc integrates the proteasome and transcriptome to regulate nuclear hormone receptors. *Mol. Cell. Biol.* 26: 8539-8550.
- An, B.S., et al. 2009. Rapid effect of GNRH1 on follicle-stimulating hormone β gene expression in LβT2 mouse pituitary cells requires the progesterone receptor. *Biol. Reprod.* 81: 243-249.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.