# SANTA CRUZ BIOTECHNOLOGY, INC.

# NCoA-3 (N-17): sc-7217



# BACKGROUND

Nuclear receptors for steroids, thyroid hormones and retinoic acids are liganddependent 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 hormoneresponsive 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/CBPdependent transcription factors.

# CHROMOSOMAL LOCATION

Genetic locus: NCOA3 (human) mapping to 20q13.12.

## SOURCE

NCoA-3 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of NCoA-3 of human origin.

# PRODUCT

Each vial contains 200  $\mu$ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-7217 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-7217 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **RESEARCH USE**

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

# **APPLICATIONS**

CoA-3 (N-17) is recommended for detection of NCoA-3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

NCoA-3 (N-17) is also recommended for detection of NCoA-3 in additional species, including equine, canine, bovine and porcine.

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

NCoA-3 (N-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NCoA-3: 160 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, HeLa nuclear extract: sc-2120 or K-562 nuclear extract: sc-2130.

#### **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 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<sup>™</sup> Mounting Medium: sc-24941.

### DATA



	0'	30′	60'	90'
p300				
NCoA-3			-	-
SRC-1				
GRIP				
Input	-	-	-	-

NCoA-3 (N-17): sc-7217. Western blot analysis of NCoA-3 expression in HL-60 whole cell lysate (**A**) and HeLa (**B**), K-562 (**C**) and MCF7 (**D**) nuclear extracts. ChIP analysis of cofactor occupancy dynamics on the ICAMI promoter in 293 cells in response to IL-1 treatment. Antibodies tested include 9300 (C-20); sc-585, p300 (N-15); sc-584, p300 (H-272); sc-8981, NCoA-3 (F-2); sc-5305, NCoA-3 (M-397); sc-9119, NCoA-3 (N-17); sc-7217, NCoA-3 (C-20); sc-7216, SRC-1 (M-341); sc-8995, SRC-1 (C-20); sc-6096, SRC-1 (M-20); sc-6098 and GRIP1 (M-343); sc-8996. Data kindly provided by M.G. Rosenfeld and reproduced with permission from Baek et al., Cell 2002, 110: S5-67.

# SELECT PRODUCT CITATIONS

- Hestermann, E.V., et al. 2003. Agonist and chemopreventative ligands induce differential transcriptional cofactor recruitment by aryl hydrocarbon receptor. Mol. Cell. Biol. 21: 7920-7925.
- 2. Deschênes, J., et al. 2007. Regulation of GREB1 transcription by estrogen receptor  $\alpha$  through a multipartite enhancer spread over 20 kb of upstream flanking sequences. J. Biol. Chem. 282: 17335-17339.

# **STORAGE**

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

#### MONOS Satisfation Guaranteed Try NCoA-3 (F-2): sc-5305 or NCoA-3 (B-3): sc-515530, our highly recommended monoclonal aternatives to NCoA-3 (N-17).