SANTA CRUZ BIOTECHNOLOGY, INC.

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

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 co-activators 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 GRIP-1 (for GR interacting protein-1), also designated NCoA-2 or TIF2; SRC-1 (for steroid receptor co-activator-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.

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 IgG_1 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-5305 X, 200 µg/0.1 ml.

NCoA-3 (F-2) is available conjugated to agarose (sc-5305 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-5305 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-5305 PE), fluorescein (sc-5305 FITC), Alexa Fluor® 488 (sc-5305 AF488), Alexa Fluor® 546 (sc-5305 AF546), Alexa Fluor® 594 (sc-5305 AF594) or Alexa Fluor® 647 (sc-5305 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-5305 AF680) or Alexa Fluor® 790 (sc-5305 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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.

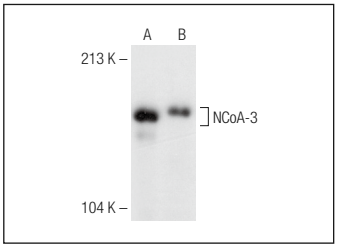
Molecular Weight of NCoA-3: 160 kDa.

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

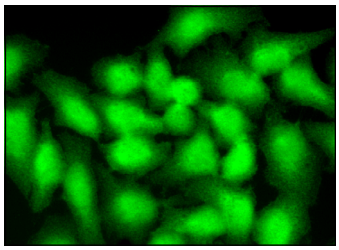
STORAGE

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

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. Immunofluorescence staining of formalin-fixed HeLa cells showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Baek, S., et al. 2002. Exchange of N-CoR corepressor and TIP60 coactivator complexes links gene expression by NFκB and β-Amyloid precursor protein. Cell 110: 55-67.
2. 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.
3. Bowe, D.B., et al. 2006. O-GlcNAc integrates the proteasome and transcriptome to regulate nuclear hormone receptors. Mol. Cell. Biol. 26: 8539-8550.
4. 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.
5. Hernández-Hernández, O.T., et al. 2010. Progesterone and estradiol effects on SRC-1 and SRC-3 expression in human astrocytoma cell lines. Endocrine 37: 194-200.
6. Duplessis, T.T., et al. 2011. Phosphorylation of estrogen receptor α at serine 118 directs recruitment of promoter complexes and gene-specific transcription. Endocrinology 152: 2517-2526.
7. Zhang, B., et al. 2018. NCoA3 loss disrupts molecular signature of chondrocytes and promotes posttraumatic osteoarthritis progression. Cell. Physiol. Biochem. 49: 2396-2413.
8. Jeong, J.S., et al. 2020. The expression and contribution of SRCs with preeclampsia placenta. Reprod. Sci. 27: 1513-1521.
9. Hu, M., et al. 2020. SRC-3 functions as a coactivator of T-bet by regulating the maturation and antitumor activity of natural killer cells. Cancer Immunol. Res. 8: 1150-1162.

RESEARCH USE

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