

NCoA-3 (4i301): sc-71654

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 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

1. Ribeiro, R.C., Kushner, P.J. and Baxter, J.D. 1995. The nuclear hormone receptor gene superfamily. *Ann. Rev. Med.* 46: 443-453.
2. Onate, S.A., Tsai, S.Y., Tsai, M.J. and O'Malley, B.W. 1995. Sequence and characterization of a coactivator for the steroid hormone receptor superfamily. *Science* 270: 1354-1357.
3. Hong, H., Kohli, K., Trivedi, A., Johnson, D.L. and Stallcup, M.R. 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.
4. Li, H., Gomes, P.J. and Chen, J.D. 1997. RAC3, a steroid/nuclear receptor-associated coactivator that is related to SRC-1 and TIF2. *Proc. Natl. Acad. Sci. USA* 94: 8479-8484.
5. Anzick, S.L., Kononen, J., Walker, R.L., Azorsa, D.O., Tanner, M.M., Guan, X.Y., Sauter, G., Kallioniemi, O.P., Trent, J.M. and Meltzer, P.S. 1997. AIB1, a steroid receptor coactivator amplified in breast and ovarian cancer. *Science* 277: 965-968.
6. Torchia, J., Rose, D.W., Inostroza, J., Kamei, Y., Westin, S., Glass, C.K. and Rosenfeld, M.G. 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.

SOURCE

NCoA-3 (4i301) is a mouse monoclonal antibody raised against amino acids 605-1294 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.

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 (4i301) 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 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

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.

Molecular Weight of NCoA-3: 160 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285, HeLa nuclear extract: sc-2120 or HeLa whole cell lysate: sc-2200.

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

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.