SANTA CRUZ BIOTECHNOLOGY, INC.

SRC-1 (M-341): sc-8995



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 corepressors 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); RAC3 (also designated AIB1, for amplified in breast cancer, or ACTR), which displays elevated expression in estrogen receptor positive ovarian and breast cancers; and p/CIP (for p300/CBP/ co-integrator protein), which is required for the transcriptional activation of p300/CBPdependent transcription factors.

CHROMOSOMAL LOCATION

Genetic locus: NCOA1 (human) mapping to 2p23.3; Ncoa1 (mouse) mapping to 12 A1.1.

SOURCE

SRC-1 (M-341) is a rabbit polyclonal antibody raised against amino acids 350-690 of SRC-1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-8995 X, 200 µg/0.1 ml.

APPLICATIONS

SRC-1 (M-341) is recommended for detection of SRC-1 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SRC-1 (M-341) is also recommended for detection of SRC-1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SRC-1 siRNA (h): sc-36555, SRC-1 siRNA (m): sc-36556, SRC-1 siRNA (r): sc-270126, SRC-1 shRNA Plasmid (h): sc-36555-SH, SRC-1 shRNA Plasmid (m): sc-36556-SH, SRC-1 shRNA Plasmid (r): sc-270126-SH, SRC-1 shRNA (h) Lentiviral Particles: sc-36555-V, SRC-1 shRNA (m) Lentiviral Particles: sc-36556-V and SRC-1 shRNA (r) Lentiviral Particles: sc-270126-V.

SRC-1 (M-341) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of SRC-1: 160 kDa.

Positive Controls: KNRK nuclear extract: sc-2141 or K562 nuclear extract: sc-2130.

STORAGE

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

DATA





ChIP analysis of in vivo binding of ROR and its recruitment of coactivators to $ROR\alpha$ -responsive promoters in freshly dissected cerebella derived from wild type (+/+) and staggerer (Sg) mice. Control Input (**A**). Antibodies used included SRC-1 (M-341): sc-8995, SRC-1 (C-20): sc-6096 and SRC-1 (M-20): sc-6098 (B), Grip-1 (M-434) sc-8996 (C), NCoA-3 (F-2): sc-5305, NCoA-3 (M-397) sc-9119, NCoA-3 (N-17): sc-7217 and NCoA-3 (C-20)

SRC-1 (M-341); sc-8995. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bronchus tissue showing nuclear and cytoplasmic staining of respiratory epithelial cells and smooth muscle cells

sc-7216 (D). Data kindly provided by M.G. Rosenfeld and reproduced with permission from Gold et al. Neuron 2003, 40: 1119-1131.

SELECT PRODUCT CITATIONS

- 1. Litterst, C.M., et al. 2001. Transcriptional activation by Stat6 requires the direct interaction with NCoA-1. J. Biol. Chem. 276: 45713-45721.
- 2. McIlroy, M., et al. 2010. Interaction of developmental transcription factor HOXC11 with steroid receptor coactivator SRC-1 mediates resistance to endocrine therapy in breast cancer. Cancer Res. 70: 1585-1594.
- 3. Lappano, R., et al. 2011. The cholesterol metabolite 25-hydroxycholesterol activates estrogen receptor α -mediated signaling in cancer cells and in cardiomyocytes. PLoS ONE 6: e16631.
- 4. Suresh, P.S., et al. 2011. The effect of progesterone replacement on gene expression in the corpus luteum during induced regression and late luteal phase in the bonnet monkey (Macaca radiata). Reprod. Biol. Endocrinol. 9:20.
- 5. Gynther, P., et al. 2011. Mechanism of 1α , 25-dihydroxyvitamin D₂-dependent repression of interleukin-12B. Biochim. Biophys. Acta 1813: 810-818.
- 6. McCartan, D., et al. 2012. Global characterization of the SRC-1 transcriptome identifies ADAM22 as an ER-independent mediator of endocrineresistant breast cancer. Cancer Res. 72: 220-229.

RESEARCH USE

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

MONOS Satisfation Guaranteed

Try SRC-1 (1135/H4): sc-32789 or SRC-1 (8): sc-136077, our highly recommended monoclonal aternatives to SRC-1 (M-341).