SANTA CRUZ BIOTECHNOLOGY, INC.

N-CoR (E-6): sc-518134

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Retinoids are metabolites of vitamin A (retinol) and are believed to represent important signaling molecules during vertebrate development and tissue differentiation. Two families of retinoid receptors have been identified. Retinoic acid receptors (RARs), include RARα, RARβ and RARγ, each of which have a high affinity for all-*trans* retinoic acids and belong to the same class of nuclear transcription factors as thyroid hormone receptors, vitamin D_3 receptor and ecdysone receptor. Two cofactors that function to repress transcription, designated SMRT and N-CoR, have been shown to associate with the thyroid receptor and RAR in their unliganded state and are released from them upon ligand binding. The carboxy termini of both proteins contain receptor interacting domains while their amino termini contain two previously undescribed repressor domains. SMRT (silencing mediator for RARs and TRs) is 1,495 amino acids in length. N-CoR (nuclear receptor corepressor) is a protein 2,453 amino acids in length.

REFERENCES

1. Ishikawa, T., et al. 1990. A functional retinoic acid receptor encoded by the gene on human chromosome 12. Mol. Endocrinol. 4: 837-844.
2. Yang, N., et al. 1991. Characterization of DNA-binding and retinoic acid-binding properties of retinoic acid receptor. Proc. Natl. Acad. Sci. USA 88: 3559-3563.
3. Mangelsdorf, D.J., et al. 1994. The retinoid receptors. In Sporn, M.B., et al, eds. The Retinoids: Biology, Chemistry, and Medicine. New York: Raven Press, Ltd., 319-349.
4. Bhat, M.K., et al. 1994. Phosphorylation enhances the target gene sequence-dependent dimerization of thyroid hormone receptor with retinoid X receptor. Proc. Natl. Acad. Sci. USA 91: 7927-7931.

CHROMOSOMAL LOCATION

Genetic locus: NCOR1 (human) mapping to 17p12; Ncor1 (mouse) mapping to 11 B2.

SOURCE

N-CoR (E-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1359-1379 of N-CoR of human origin.

PRODUCT

Each vial contains 200 µg IgG_3 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

N-CoR (E-6) is available conjugated to agarose (sc-518134 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-518134 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518134 PE), fluorescein (sc-518134 FITC), Alexa Fluor® 488 (sc-518134 AF488), Alexa Fluor® 546 (sc-518134 AF546), Alexa Fluor® 594 (sc-518134 AF594) or Alexa Fluor® 647 (sc-518134 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-518134 AF680) or Alexa Fluor® 790 (sc-518134 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

N-CoR (E-6) is recommended for detection of N-CoR of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 N-CoR siRNA (h): sc-36001, N-CoR siRNA (m): sc-36002, N-CoR shRNA Plasmid (h): sc-36001-SH, N-CoR shRNA Plasmid (m): sc-36002-SH, N-CoR shRNA (h) Lentiviral Particles: sc-36001-V and N-CoR shRNA (m) Lentiviral Particles: sc-36002-V.

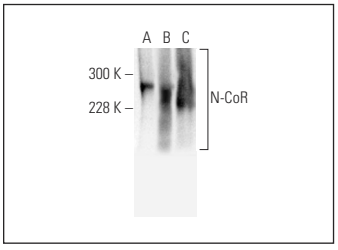
Molecular Weight of N-CoR: 270 kDa.

Positive Controls: SW480 cell lysate: sc-2219 or mouse brain extract: sc-2253.

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.

DATA



N-CoR (E-6): sc-518134. Western blot analysis of N-CoR expression in 293T (**A**) and SW480 (**B**) whole cell lysates and mouse brain tissue extract (**C**). Detection reagent used: m-IgGκ BP-HRP: sc-516102.

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.

PROTOCOLS

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