SANTA CRUZ BIOTECHNOLOGY, INC.

N-CoR (H-303): sc-8994

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 1495 amino acids in length. N-CoR (nuclear receptor corepressor) is a protein 2453 amino acids in length.

CHROMOSOMAL LOCATION

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

SOURCE

N-CoR (H-303) is a rabbit polyclonal antibody raised against amino acids 1881-2183 of N-CoR of human origin.

PRODUCT

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

APPLICATIONS

N-CoR (H-303) is recommended for detection of N-CoR 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).

N-CoR (H-303) is also recommended for detection of N-CoR in additional species, including equine, canine and bovine.

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: K-562 whole cell lysate: sc-2203 or K-562 nuclear extract: sc-2130.

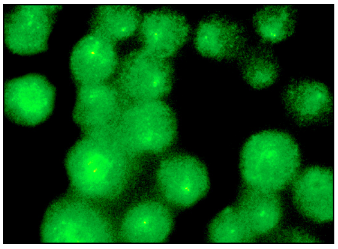
STORAGE

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

RESEARCH USE

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

DATA



N-CoR (H-303): sc-8994. Immunofluorescence staining of methanol-fixed K-562 cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Zhang, Y., et al. 2002. Silencing of transcription of the human luteinizing hormone receptor gene by histone deacetylase-mSin3A complex. J. Biol. Chem. 277: 33431-33438.
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3. Melnick, A., et al. 2002. Critical residues within the BTB domain of PLZF and Bcl-6 modulate interaction with corepressors. Mol. Cell. Biol. 22: 1804-18.
4. Hilton, T., et al. 2010. Pitx2-dependent occupancy by histone deacetylases is associated with T-box gene regulation in mammalian abdominal tissue. J. Biol. Chem. 285: 11129-11142.
5. Di Leva, G., et al. 2010. MicroRNA cluster 221-222 and estrogen receptor α interactions in breast cancer. J. Natl. Cancer Inst. 102: 706-721.
6. Jokela, T.A., et al. 2011. Cellular content of UDP-N-acetylhexosamines controls hyaluronan synthase 2 expression and correlates with O-linked N-acetylglucosamine modification of transcription factors YY1 and SP1. J. Biol. Chem. 286: 33632-33640.
7. Sacilotto, N., et al. 2011. Epigenetic transcriptional regulation of the growth arrest-specific gene 1 (Gas1) in hepatic cell proliferation at mononucleosomal resolution. PLoS ONE 6: e23318.
8. Altintas, D.M., et al. 2011. Cell cycle regulated expression of NCoR might control cyclic expression of androgen responsive genes in an immortalized prostate cell line. Mol. Cell. Endocrinol. 332: 149-162.