

ROR α (C-12): sc-26380

BACKGROUND

Retinoids are metabolites of vitamin A (retinol) and represent an important class of signaling molecule during vertebrate development and tissue differentiation. A large group of nuclear transcription factors, including vitamin D3 receptor (VDR), thyroid hormone receptor (TR), RAR, RXR and ecdysone receptor, have a high affinity for retinoic acids and are members of the steroid receptor superfamily. Members of this family act by directly associating with DNA sequences known as hormone response elements (HREs) and bind DNA as either homo- or heterodimers. ROR α is a member of the steroid receptor superfamily and is classified as an "orphan receptor" due to the lack of a defined ligand. Two isoforms of ROR α have been described and are designated ROR α 1 and ROR α 2. ROR α , also referred to as RZR, binds DNA as a monomer at consensus ROR α response elements (ROREs).

REFERENCES

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2. Mangelsdorf, D.J., et al. 1994. The Retinoids: Biology, Chemistry, and Medicine, 2nd Edition. Sporn, M.B., et al, eds. New York: Raven Press, Ltd., 314-349.
3. 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.
4. Mangelsdorf, D.J., et al. 1995. The nuclear receptor superfamily: the second decade. *Cell* 83: 835-839.
5. Leblanc, B.P., et al. 1995. 9-cis retinoic acid signaling: changing partners causes some excitement. *Genes and Dev.* 9: 1811-1816.
6. Mangelsdorf, D.J., et al. 1995. The RXR heterodimers and orphan receptors. *Cell* 83: 841-850.
7. Giguere, V., et al. 1995. Determinants of target gene specificity for ROR α 1: monomeric DNA binding by an orphan nuclear receptor. *Mol. Cell. Biol.* 15: 2517-2526.

CHROMOSOMAL LOCATION

Genetic locus: RORA (human) mapping to 15q22.2; Rora (mouse) mapping to 9 C.

SOURCE

ROR α (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ROR α 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.

Blocking peptide available for competition studies, sc-26380 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-26380 X, 200 μ g/0.1 ml.

APPLICATIONS

ROR α (C-12) is recommended for detection of ROR α 1, 2, 3 and 4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and 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).

ROR α (C-12) is also recommended for detection of ROR α 1, 2, 3 and 4 in additional species, including equine, canine, bovine, porcine and avian.

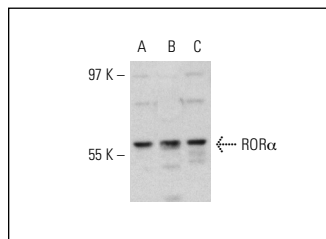
Suitable for use as control antibody for ROR α siRNA (h): sc-38862, ROR α siRNA (m): sc-38863, ROR α shRNA Plasmid (h): sc-38862-SH, ROR α shRNA Plasmid (m): sc-38863-SH, ROR α shRNA (h) Lentiviral Particles: sc-38862-V and ROR α shRNA (m) Lentiviral Particles: sc-38863-V.

ROR α (C-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ROR α : 67 kDa.

Positive Controls: L6 whole cell lysate: sc-364196, KNRK whole cell lysate: sc-2214 or LNCaP cell lysate: sc-2231.

DATA



ROR α (C-12): sc-26380. Western blot analysis of ROR α expression in L6 (A), KNRK (B) and LNCaP (C) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Serra, H.G., et al. 2006. ROR α -mediated Purkinje cell development determines disease severity in adult SCA1 mice. *Cell* 127: 697-708.

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 or our catalog for detailed protocols and support products.