# SANTA CRUZ BIOTECHNOLOGY, INC.

# RORα3 (Q-13): sc-26378



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. This family acts by directly associating with DNA sequences known as hormone response elements (HREs) and bind DNA as either homo- or heterodimers. ROR $\alpha$  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 $\alpha$  have been described and are designated ROR $\alpha$ 1 and ROR $\alpha$ 2. ROR $\alpha$ , also referred to as RZR, binds DNA as a monomer at consensus ROR $\alpha$  response elements (ROREs).

## REFERENCES

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- Mangelsdorf, D.J., et al. 1995. The nuclear receptor superfamily: the second decade. Cell 83: 835-839.
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- 7. Giguere, V., et al. 1995. Determinants of target gene specificity for ROR $\alpha$ 1: monomeric DNA binding by an orphan nuclear receptor. Mol. Cell. Biol. 15: 2517-26.
- Schrader, M., et al. 1996. Identification of natural monomeric response elements of the nuclear receptor RZR/ROR. They also bind COUP-TF homodimers. J. Biol. Chem. 271: 19732-19736.

#### CHROMOSOMAL LOCATION

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

#### SOURCE

ROR $\alpha$ 3 (Q-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ROR $\alpha$ 3 of human origin.

## **STORAGE**

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

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-26378 P, (100  $\mu$ 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-26378 X, 200  $\mu$ g/0.1 ml.

## **APPLICATIONS**

ROR $\alpha$ 3 (Q-13) is recommended for detection of ROR $\alpha$ 3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) 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).

Suitable for use as control antibody for ROR $\alpha$ 1 siRNA (h): sc-38864 .

 $ROR\alpha3$  (Q-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>TM</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluor-escence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>TM</sup> Mounting Medium: sc-24941.

## **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.