

ROR α (X-23): sc-133973

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

1. Koelle, M.R., et al. 1991. The *Drosophila* EcR gene encodes an ecdysone receptor, a new member of the steroid receptor superfamily. *Cell* 67: 59-77.
2. Mangelsdorf, D.J., et al. 1994. The retinoid receptors. In Sporn, M.B., eds., *The Retinoids: Biology, Chemistry, and Medicine*. 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. and Stunnenberg, H.G. 1995. 9-*cis* retinoic acid signaling: changing partners causes some excitement. *Genes Dev.* 9: 1811-1816.
6. Mangelsdorf, D.J. and Evans, R.M. 1995. The RXR heterodimers and orphan receptors. *Cell* 83: 841-850.

CHROMOSOMAL LOCATION

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

SOURCE

ROR α (X-23) is a Protein A purified rabbit polyclonal antibody raised against synthetic ROR α peptide of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

ROR α (X-23) is recommended for detection of ROR α of mouse, rat, human, zebrafish and canine 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)], 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).

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.

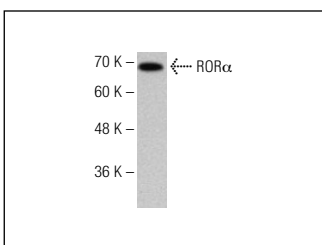
Molecular Weight of ROR α : 67 kDa.

Positive Controls: mouse cerebellum extract: sc-2403, KNRK whole cell lysate: sc-2214 or LNCaP cell lysate: sc-2231

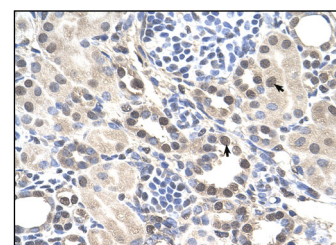
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



ROR α (X-23): sc-133973. Western blot analysis of ROR α 3 expression in Jurkat whole cell lysate.



ROR α (X-23): sc-133973. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human kidney tissue showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Archer, A., et al. 2012. Fasting-induced FGF21 is repressed by LXR activation via recruitment of an HDAC3 corepressor complex in mice. *Mol. Endocrinol.* 26: 1980-1990.

RESEARCH USE

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