

RXR α (D-20): sc-553

BACKGROUND

Two families of retinoid receptors, RARs and RXRs, have been identified. Retinoic acid receptors (RARs) include RAR α , RAR β and RAR γ , 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 D₃ receptor and ecdysone receptor. The ligand-binding domains of the RARs are highly conserved and RAR isoforms are expressed in distinct patterns throughout development and in the mature organism. Members of the retinoid X receptor (RXR) family, RXR α , RXR β and RXR γ , are activated by 9-*cis*-RA, a stereo- and photo-isomer of all *trans*-RA that is expressed *in vivo* in both liver and kidney and may represent a widely used hormone. As is true for the RAR subfamily, the RXR receptors are closely related to each other both in their DNA-binding and ligand-binding domains and are encoded by separate genes at distinct chromosomal loci.

CHROMOSOMAL LOCATION

Genetic locus: RXRA (human) mapping to 9q34.2; Rxra (mouse) mapping to 2 A3.

SOURCE

RXR α (D-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of RXR α of human origin.

PRODUCT

Each vial contains 100 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-553 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-553 X, 100 μ g/0.1 ml.

APPLICATIONS

RXR α (D-20) is recommended for detection of RXR α 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)], 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 RXR α siRNA (h): sc-36447, RXR α siRNA (m): sc-36448, RXR α shRNA Plasmid (h): sc-36447-SH, RXR α shRNA Plasmid (m): sc-36448-SH, RXR α shRNA (h) Lentiviral Particles: sc-36447-V and RXR α shRNA (m) Lentiviral Particles: sc-36448-V.

RXR α (D-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

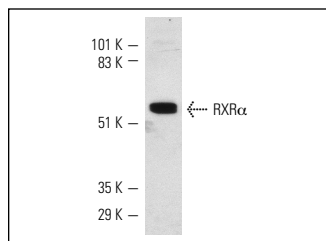
Molecular Weight of RXR α : 50-54 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, HeLa whole cell lysate: sc-2200 or MCF7 whole cell lysate: sc-2206.

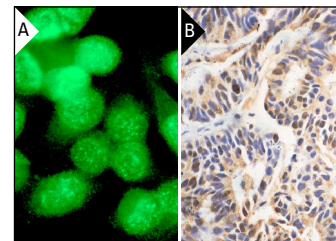
STORAGE

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

DATA



RXR α (D-20): sc-553. Western blot analysis of RXR α expression in HeLa nuclear extracts.



RXR α (D-20): sc-553. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human colon carcinoma tissue at low magnification showing nuclear staining (B).

SELECT PRODUCT CITATIONS

1. Sacchetti, P., et al. 2002. Requirements for heterodimerization between the orphan nuclear receptor Nurr1 and retinoid X receptors. *J. Biol. Chem.* 277: 35088-35096.
2. Alimirah, F., et al. 2011. Functional significance of vitamin D receptor FokI polymorphism in human breast cancer cells. *PLoS ONE* 6: e16024.
3. Nishi, H., et al. 2011. MicroRNA-27a regulates β cardiac myosin heavy chain gene expression by targeting thyroid hormone receptor β 1 in neonatal rat ventricular myocytes. *Mol. Cell. Biol.* 31: 744-755.
4. Fernández-Alvarez, A., et al. 2011. Human SREBP1c expression in liver is directly regulated by peroxisome proliferator-activated receptor α (PPAR α). *J. Biol. Chem.* 286: 21466-21477.
5. Shen, Q., et al. 2011. Liver X receptor-retinoid X receptor (LXR-RXR) heterodimer cistrome reveals coordination of LXR and AP1 signaling in keratinocytes. *J. Biol. Chem.* 286: 14554-14563.
6. Wu, S.M., et al. 2011. Cathepsin H regulated by the thyroid hormone receptors associate with tumor invasion in human hepatoma cells. *Oncogene* 30: 2057-2069.
7. Oleaga C., et al. 2013. Cocoa flavanol metabolites activate HNF-3 β , Sp1, and NFY-mediated transcription of apolipoprotein AI in human cells. *Mol. Nutr. Food Res.* E-published.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **RXR α (F-1): sc-46659**, our highly recommended monoclonal alternative to RXR α (D-20). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **RXR α (F-1): sc-46659**.