

RXR γ (H-105): sc-25737

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 RAR α , RAR β and RAR γ , each of which have a high affinity for all transretinoic 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 photoisomer 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.

REFERENCES

1. Ishikawa, T., et al. 1990. A functional retinoic acid receptor encoded by the gene on human chromosome 12. *Mol. Endocrinol.* 4: 837-844.
2. Yang, N., et al. 1991. Characterization of DNA-binding and retinoic acid-binding properties of retinoic acid receptor. *Proc. Natl. Acad. Sci. USA* 88: 3559-3563.
3. 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.
4. Levin, A.A., et al. 1992. 9-*cis*-Retinoic acid stereoisomer binds and activates the nuclear receptor RXR α . *Nature* 355: 359-361.

CHROMOSOMAL LOCATION

Genetic locus: RXRG (human) mapping to 1q23.3; Rxrg (mouse) mapping to 1 H2.3.

SOURCE

RXR γ (H-105) is a rabbit polyclonal antibody raised against amino acids 1-105 of RXR γ 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-25737 X, 200 μ g/0.1 ml.

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.

APPLICATIONS

RXR γ (H-105) is recommended for detection of RXR γ 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

RXR γ (H-105) is also recommended for detection of RXR γ in additional species, including equine, canine, bovine and porcine.

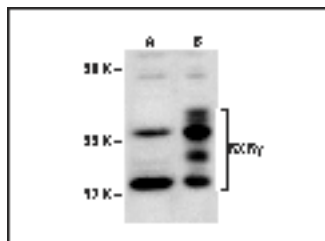
Suitable for use as control antibody for RXR γ siRNA (h): sc-44083, RXR γ siRNA (m): sc-38879, RXR γ shRNA Plasmid (h): sc-44083-SH, RXR γ shRNA Plasmid (m): sc-38879-SH, RXR γ shRNA (h) Lentiviral Particles: sc-44083-V and RXR γ shRNA (m) Lentiviral Particles: sc-38879-V.

RXR γ (H-105) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of RXR γ : 50-54 kDa.

Positive Controls: RXR γ (h2): 293T Lysate: sc-177886 or Hep G2 cell lysate: sc-2227.

DATA



RXR γ (H-105): sc-25737. Western blot analysis of RXR γ expression in mouse (lane R) and human RXR γ (lane C) whole cell lysates. sc-177886 (R) and sc-2227 (C) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Catherino, W.H., et al. 2007. Uterine leiomyomas express a molecular pattern that lowers retinoic acid exposure. *Fertil. Steril.* 87: 1388-1398.

PROTOCOLS

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

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Try **RXR γ (A-2): sc-365252** or **RXR γ (G-6): sc-514134**, our highly recommended monoclonal alternatives to RXR γ (H-105).