

RXR γ (h): 293 Lysate: sc-158943

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, RAR α , RAR β and RAR 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.

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.
5. Heyman, R.A., et al. 1992. 9-*cis*-Retinoic acid is a high-affinity ligand for the retinoid X receptor. *Cell* 68: 397-406.
6. Mangelsdorf, D.J., et al. 1994. The retinoid receptors. In Sporn, M.B., et al, eds. *The Retinoids: Biology, Chemistry, and Medicine*. New York: Raven Press, Ltd., 319-349.
7. 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.

CHROMOSOMAL LOCATION

Genetic locus: RXRG (human) mapping to 1q23.3.

PRODUCT

RXR γ (h): 293 Lysate represents a lysate of human RXR γ transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

RXR γ (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive RXR γ antibodies. Recommended use: 10-20 μ l per lane.

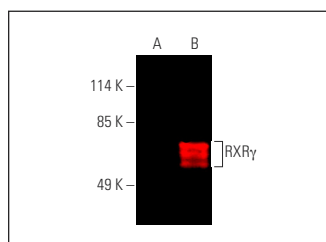
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

RXR γ (A-2): sc-365252 is recommended as a positive control antibody for Western Blot analysis of enhanced human RXR γ expression in RXR γ transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

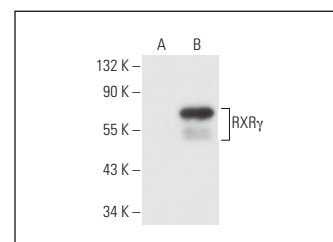
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



RXR γ (A-2): sc-365252. Near-infrared western blot analysis of RXR γ expression in non-transfected: sc-110760 (A) and human RXR γ transfected: sc-158943 (B) 293 whole cell lysates. Blocked with UltraCruz[®] Blocking Reagent: sc-516214. Detection reagent used: m-IgG κ BP-CFL 790: sc-516181.



RXR γ (A-2): sc-365252. Western blot analysis of RXR γ expression in non-transfected: sc-110760 (A) and human RXR γ transfected: sc-158943 (B) 293 whole cell lysates.

RESEARCH USE

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