

RXR α / β / γ (F-1): sc-46659

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.

SOURCE

RXR α / β / γ (F-1) is a mouse monoclonal antibody raised against amino acids 198-462 of RXR α of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-46659 X, 200 μ g/0.1 ml.

RXR α / β / γ (F-1) is available conjugated to agarose (sc-46659 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-46659 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-46659 PE), fluorescein (sc-46659 FITC), Alexa Fluor[®] 488 (sc-46659 AF488), Alexa Fluor[®] 546 (sc-46659 AF546), Alexa Fluor[®] 594 (sc-46659 AF594) or Alexa Fluor[®] 647 (sc-46659 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-46659 AF680) or Alexa Fluor[®] 790 (sc-46659 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

RXR α / β / γ (F-1) is recommended for detection of RXR α , RXR β and RXR γ of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

RXR α / β / γ (F-1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of RXR α / β / γ : 50-54 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, HeLa whole cell lysate: sc-2200 or RXR α (h): 293T Lysate: sc-111936.

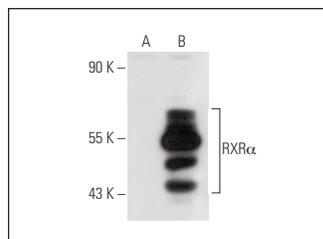
STORAGE

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

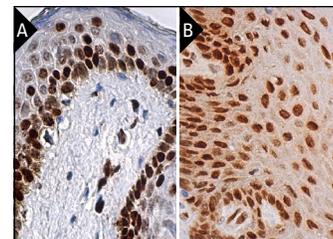
RESEARCH USE

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

DATA



RXR α / β / γ (F-1): sc-46659. Western blot analysis of RXR α expression in non-transfected: sc-117752 (A) and human RXR α transfected: sc-111936 (B) 293T whole cell lysates.



RXR α / β / γ (F-1): sc-46659. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing nuclear staining of epidermal cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded oral mucosa tissue showing nuclear staining of squamous epithelial cells (B).

SELECT PRODUCT CITATIONS

- Catherino, W.H., et al. 2007. Uterine leiomyomas express a molecular pattern that lowers retinoic acid exposure. *Fertil. Steril.* 87: 1388-1398.
- Kuhla, A., et al. 2016. Prophylactic and abundant intake of α -lipoic acid causes hepatic steatosis and should be reconsidered in usage as an anti-aging drug. *Biofactors* 42: 179-189.
- Pasutto, F., et al. 2017. Pseudoexfoliation syndrome-associated genetic variants affect transcription factor binding and alternative splicing of LOXL1. *Nat. Commun.* 8: 15466.
- Feng, F., et al. 2018. Pregnane X receptor mediates sorafenib resistance in advanced hepatocellular carcinoma. *Biochim. Biophys. Acta* 1862: 1017-1030.
- Flora, G.D., et al. 2019. Non-genomic effects of the pregnane X receptor negatively regulate platelet functions, thrombosis and haemostasis. *Sci. Rep.* 9: 17210.
- Werneck-Gomes, H., et al. 2020. Tumor-associated macrophages (TAM) are recruited to the aging prostate epithelial lesions and become intermingled with basal cells. *Andrology* 8: 1375-1386.
- Chandra, A., et al. 2021. Inhibition of microRNA-128-3p attenuates hypercholesterolemia in mouse model. *Life Sci.* 264: 118633.
- Fitoussi, R., et al. 2022. A Harungana madagascariensis extract with retinol-like properties: gene upregulations and protein expressions in human fibroblasts and skin explants. *Int. J. Cosmet. Sci.* 44: 201-215.
- Chen, S., et al. 2024. Metabolomics analyses reveal the liver-protective mechanism of Wang's metabolic formula on metabolic-associated fatty liver disease. *Heliyon* 10: e33418.

PROTOCOLS

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