

# RXR $\alpha$ / $\beta$ / $\gamma$ (F-1): sc-46659

## BACKGROUND

Two families of retinoid receptors, RARs and RXRs, have been identified. Retinoic acid receptors (RARs) include RAR $\alpha$ , RAR $\beta$  and RAR $\gamma$ , 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 D<sub>3</sub> 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 $\alpha$ , RXR $\beta$  and RXR $\gamma$ , 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 $\alpha$ / $\beta$ / $\gamma$  (F-1) is a mouse monoclonal antibody raised against amino acids 198-462 of RXR $\alpha$  of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> 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  $\mu$ g/0.1 ml.

RXR $\alpha$ / $\beta$ / $\gamma$  (F-1) is available conjugated to agarose (sc-46659 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-46659 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-46659 PE), fluorescein (sc-46659 FITC), Alexa Fluor<sup>®</sup> 488 (sc-46659 AF488), Alexa Fluor<sup>®</sup> 546 (sc-46659 AF546), Alexa Fluor<sup>®</sup> 594 (sc-46659 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-46659 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-46659 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-46659 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

RXR $\alpha$ / $\beta$ / $\gamma$  (F-1) is recommended for detection of RXR $\alpha$ , RXR $\beta$  and RXR $\gamma$  of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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 $\alpha$ / $\beta$ / $\gamma$  (F-1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of RXR $\alpha$ / $\beta$ / $\gamma$ : 50-54 kDa.

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

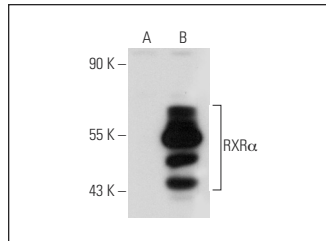
## STORAGE

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

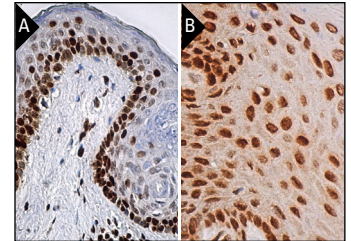
## RESEARCH USE

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

## DATA



RXR $\alpha$ / $\beta$ / $\gamma$  (F-1): sc-46659. Western blot analysis of RXR $\alpha$  expression in non-transfected: sc-117752 (A) and human RXR $\alpha$  transfected: sc-111936 (B) 293T whole cell lysates.



RXR $\alpha$ / $\beta$ / $\gamma$  (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

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- Wang, Z., et al. 2012. Selective ablation of Ctip2/Bcl11b in epidermal keratinocytes triggers atopic dermatitis-like skin inflammatory responses in adult mice. *PLoS ONE* 7: e51262.
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- 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.