

# RXR $\gamma$ (G-6): sc-514134

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

RXR $\gamma$  (G-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 2-27 at the N-terminus of RXR $\gamma$  of mouse 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-514134 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-514134 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

RXR $\gamma$  (G-6) is recommended for detection of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

RXR $\gamma$  (G-6) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

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

Positive Controls: RXR $\gamma$  (h): 293 Lysate: sc-158943.

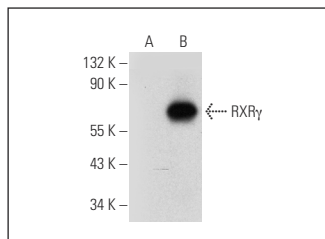
## RESEARCH USE

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

## STORAGE

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

## DATA



RXR $\gamma$  (G-6): sc-514134. Western blot analysis of RXR $\gamma$  expression in non-transfected: sc-110760 (A) and human RXR $\gamma$  transfected: sc-158943 (B) 293 whole cell lysates.

## SELECT PRODUCT CITATIONS

- Wnuk, A., et al. 2018. Benzophenone-3 impairs autophagy, alters epigenetic status, and disrupts retinoid X receptor signaling in apoptotic neuronal cells. *Mol. Neurobiol.* 55: 5059-5074.
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- Tran, H.N., et al. 2020. Reciprocal induction of MDM2 and MYCN in neural and neuroendocrine cancers. *Front. Oncol.* 10: 563156.
- Perez-Cervantes, C., et al. 2020. Enhancer transcription identifies *cis*-regulatory elements for photoreceptor cell types. *Development* 147: dev184432.
- Kaufman, M.L., et al. 2021. Initiation of Otx2 expression in the developing mouse retina requires a unique enhancer and either Ascl1 or Neurog2 activity. *Development* 148: dev199399.
- Zhang, X., et al. 2022. Endothelial caveolin-1 regulates cerebral thromboinflammation in acute ischemia/reperfusion injury. *EBioMedicine* 84: 104275.
- Luo, L., et al. 2023. Muscle injuries induce a prostacyclin-PPAR $\gamma$ /PGC1 $\alpha$ -FAO spike that boosts regeneration. *Adv. Sci.* 10: e2301519.
- Coulter, A.A., et al. 2023. Naringenin and  $\beta$ -carotene convert human white adipocytes to a beige phenotype and elevate hormone-stimulated lipolysis. *Front. Endocrinol.* 14: 1148954.



See **RXR $\alpha$ / $\beta$ / $\gamma$  (F-1): sc-46659** for RXR $\alpha$ / $\beta$ / $\gamma$  antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.