SANTA CRUZ BIOTECHNOLOGY, INC.

RXRγ (A-2): sc-365252

BACKGROUND

Two families of retinoid receptors, RARs and RXRs, have been identified. Retinoic acid receptors (RARs) include RARα, RARβ and RARγ, 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_3 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, RXRα, RXRβ and RXRγ, 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.

SOURCE

RXRγ (A-2) is a mouse monoclonal antibody raised against amino acids 1-105 of RXRγ of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} 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-365252 X, 200 µg/0.1 ml.

RXRγ (A-2) is available conjugated to agarose (sc-365252 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-365252 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365252 PE), fluorescein (sc-365252 FITC), Alexa Fluor® 488 (sc-365252 AF488), Alexa Fluor® 546 (sc-365252 AF546), Alexa Fluor® 594 (sc-365252 AF594) or Alexa Fluor® 647 (sc-365252 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365252 AF680) or Alexa Fluor® 790 (sc-365252 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

RXRγ (A-2) is recommended for detection of RXRγ of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 RXRγ siRNA (h): sc-44083, RXRγ shRNA Plasmid (h): sc-44083-SH and RXRγ shRNA (h) Lentiviral Particles: sc-44083-V.

RXRγ (A-2) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

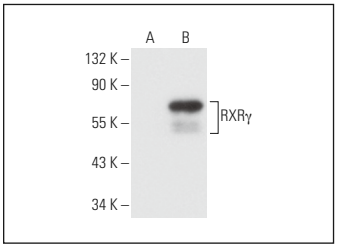
Molecular Weight of RXRγ: 50-54 kDa.

Positive Controls: RXRγ (h): 293 Lysate: sc-158943 or Hep G2 cell lysate: sc-2227.

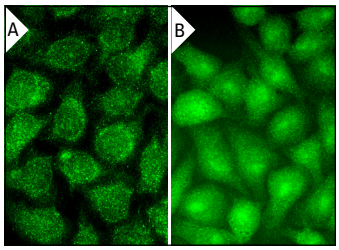
STORAGE

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

DATA



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



RXRγ (A-2): sc-365252. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization (**A**,**B**).

SELECT PRODUCT CITATIONS

1. Pasutto, F., et al. 2017. Pseudoexfoliation syndrome-associated genetic variants affect transcription factor binding and alternative splicing of LOXL1. Nat. Commun. 8: 15466.
2. Jean-Charles, N., et al. 2018. Identification and characterization of early photoreceptor *cis*-regulatory elements and their relation to Onecut1. Neural Dev. 13: 26.
3. Schick, E., et al. 2019. Lineage tracing analysis of cone photoreceptor associated *cis*-regulatory elements in the developing chicken retina. Sci. Rep. 9: 9358.
4. Brodie-Kommit, J., et al. 2021. Atoh7-independent specification of retinal ganglion cell identity. Sci. Adv. 7: eabe4983.
5. Yamasaki, S., et al. 2022. A genetic modification that reduces ON-bipolar cells in hESC-derived retinas enhances functional integration after transplantation. iScience 25: 103657.
6. Azuma, K., et al. 2022. Mitochondrial glutathione peroxidase 4 is indispensable for photoreceptor development and survival in mice. J. Biol. Chem. 298: 101824.
7. Bachu, V.S., et al. 2022. An enhancer located in a Pde6c intron drives transient expression in the cone photoreceptors of developing mouse and human retinas. Dev. Biol. 488: 131-150.
8. Srimongkol, A., et al. 2023. Sunitinib efficacy with minimal toxicity in patient-derived retinoblastoma organoids. J. Exp. Clin. Cancer Res. 42: 39.
9. Zhang, J., et al. 2023. Jarid2 promotes temporal progression of retinal progenitors via repression of Foxp1. Cell Rep. 42: 112237.

RESEARCH USE

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