

RXR γ (A-2): sc-365252

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.

CHROMOSOMAL LOCATION

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

SOURCE

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

PRODUCT

Each vial contains 200 μ g 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 μ g/0.1 ml.

RXR γ (A-2) is available conjugated to agarose (sc-365252 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365252 HRP), 200 μ g/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 μ g/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 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

RXR γ (A-2) is recommended for detection of RXR γ of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

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

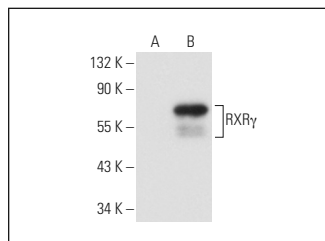
Molecular Weight of RXR γ : 50-54 kDa.

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

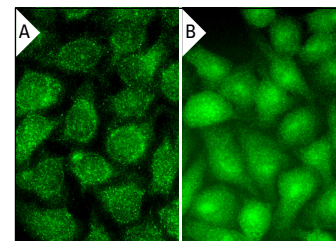
STORAGE

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

DATA



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.



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

SELECT PRODUCT CITATIONS

- Pasutto, F., et al. 2017. Pseudoexfoliation syndrome-associated genetic variants affect transcription factor binding and alternative splicing of LOXL1. *Nat. Commun.* 8: 15466.
- Jean-Charles, N., et al. 2018. Identification and characterization of early photoreceptor *cis*-regulatory elements and their relation to Onecut1. *Neural Dev.* 13: 26.
- Schick, E., et al. 2019. Lineage tracing analysis of cone photoreceptor associated *cis*-regulatory elements in the developing chicken retina. *Sci. Rep.* 9: 9358.
- Brodie-Kommit, J., et al. 2021. Atoh7-independent specification of retinal ganglion cell identity. *Sci. Adv.* 7: eabe4983.
- Lonfat, N., et al. 2021. *Cis*-regulatory dissection of cone development reveals a broad role for Otx2 and Oc transcription factors. *Development* 148: dev198549.
- 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.
- Azuma, K., et al. 2022. Mitochondrial glutathione peroxidase 4 is indispensable for photoreceptor development and survival in mice. *J. Biol. Chem.* 298: 101824.
- 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.
- Srimongkol, A., et al. 2023. Sunitinib efficacy with minimal toxicity in patient-derived retinoblastoma organoids. *J. Exp. Clin. Cancer Res.* 42: 39.

RESEARCH USE

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

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