

ROR α (H-65): sc-28612

BACKGROUND

Retinoids are metabolites of vitamin A (retinol) and represent an important class of signaling molecule during vertebrate development and tissue differentiation. A large group of nuclear transcription factors, including vitamin D₃ receptor (VDR), thyroid hormone receptor (TR), RAR, RXR and ecdysone receptor, have a high affinity for retinoic acids and are members of the steroid receptor superfamily. Members of this family act by directly associating with DNA sequences known as hormone response elements (HREs) and bind DNA as either homo- or heterodimers. ROR α is a member of the steroid receptor superfamily and is classified as an "orphan receptor" due to the lack of a defined ligand. Two isoforms of ROR α have been described and are designated ROR α 1 and ROR α 2. ROR α , also referred to as RZR, binds DNA as a monomer at consensus ROR α response elements (ROREs).

CHROMOSOMAL LOCATION

Genetic locus: RORA (human) mapping to 15q22.2; Rora (mouse) mapping to 9 C.

SOURCE

ROR α (H-65) is a rabbit polyclonal antibody raised against amino acids 196-260 mapping within an internal region of ROR α 2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-28612 X, 200 μ g/0.1 ml.

APPLICATIONS

ROR α (H-65) is recommended for detection of ROR α isoforms 1-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

ROR α (H-65) is also recommended for detection of ROR α isoforms 1-4 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ROR α siRNA (h): sc-38862, ROR α siRNA (m): sc-38863, ROR α shRNA Plasmid (h): sc-38862-SH, ROR α shRNA Plasmid (m): sc-38863-SH, ROR α shRNA (h) Lentiviral Particles: sc-38862-V and ROR α shRNA (m) Lentiviral Particles: sc-38863-V.

ROR α (H-65) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ROR α : 67 kDa.

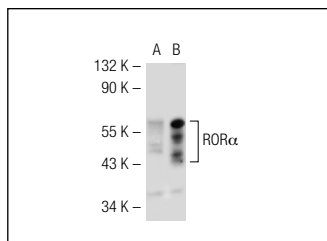
STORAGE

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

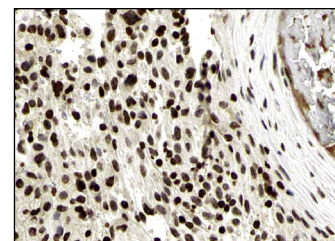
RESEARCH USE

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

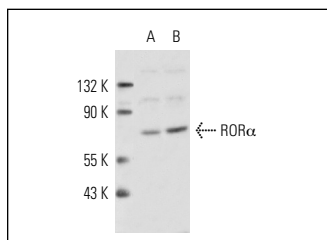
DATA



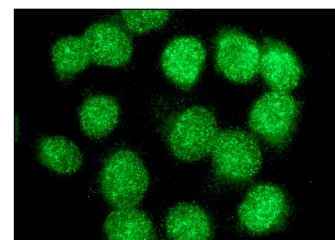
ROR α (H-65): sc-28612. Western blot analysis of ROR α expression in non-transfected: sc-117752 (A) and mouse ROR α transfected: sc-123257 (B) 293T whole cell lysates.



ROR α (H-65): sc-28612. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing nuclear staining of decidual and trophoblastic cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program.



ROR α (H-65): sc-28612. Western blot analysis of ROR α expression in rat cerebellum (A) and mouse cerebellum (B) tissue extracts.



ROR α (H-65): sc-28612. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

- Subbarayan, V., et al. 2006. 15-Lipoxygenase-2 gene regulation by its product 15(S)-hydroxyeicosatetraenoic acid through a negative feedback mechanism that involves peroxisome proliferator-activated receptor γ . *Oncogene* 25: 6015-6025.
- Pascual, M., et al. 2007. Cerebellar GABAergic progenitors adopt an external granule cell-like phenotype in the absence of Ptf1a transcription factor expression. *Proc. Natl. Acad. Sci. USA* 104: 5193-5198.
- Woods, A., et al. 2009. Control of chondrocyte gene expression by actin dynamics: a novel role of cholesterol/ROR α signaling in endochondral bone growth. *J. Cell. Mol. Med.* 13: 3497-3516.
- Sarachana, T., et al. 2011. Sex hormones in autism: androgens and estrogens differentially and reciprocally regulate RORA, a novel candidate gene for autism. *PLoS ONE* 6: e17116.
- Kottorou, A.E., et al. 2012. Altered expression of NFY-C and RORA in colorectal adenocarcinomas. *Acta Histochem.* 114: 553-61.
- Ikeda, E., et al. 2013. Molecular mechanism regulating 24-hour rhythm of dopamine D3 receptor expression in mouse ventral striatum. *Mol. Pharmacol.* 83: 959-967.