**BACKGROUND**

Retinoids are metabolites of vitamin A (retinol) that are important signaling molecules during vertebrate development and tissue differentiation. Retinoic acid receptors (RARs) and retinoid X receptors (RXRs) are nuclear transcription factors that modulate the effects of retinoids (RA) on gene expression. Most retinoid forms (including all trans RA, 9-cis RA, 4oxo RA and 3,4 dihydro RA) activate RAR family members, whereas RXR family members are activated by 9-cis-RA only. RA binds RARs, inducing a change in receptor configuration that allows DNA binding and increased gene transcription from specific genes to occur. RAR family members, which include RARα, RARβ and RARγ, belong to the same class of nuclear transcription factors as thyroid hormone receptors, vitamin D3 receptor and ecdysone receptor. Retinoid receptor expression is tissue specific; the skin expresses RAR α and RXR α, whereas the skin expresses RAR β and RAR γ is somewhat decreased in lung cancers. The human RARγ gene maps to chromosome 12q13.13.

**CHROMOSOMAL LOCATION**

Genetic locus: RARG (human) mapping to 12q13.13; Rarg (mouse) mapping to chromosome 12q13.13.

**SOURCE**

RARγ (G-1) is a mouse monoclonal antibody raised against amino acids 1-454 of RARγ of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2a 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 and human origin by Western Blotting (starting dilution 1:200, dilution range 1:50-1:500).

**APPLICATIONS**

RARγ (G-1) is recommended for detection of RARγ1 and RARγ2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for RARγ siRNA (h): sc-36392, RARγ siRNA (m): sc-36390, RARγ shRNA Plasmid (h): sc-36392-SH, RARγ shRNA Plasmid (m): sc-36390-SH, RARγ shRNA (h) Lentiviral Particles: sc-36392-V and RARγ shRNA (m) Lentiviral Particles: sc-36390-V.

RARγ (G-1) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

**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**

Western blot analysis of RARγ expression in nuclear extract of A-431 cells treated with phorbol ester (A,B). Antibodies tested include RARγ (G-1): sc-7387 (A) and RARγ (G-1): sc-7387 (B).

**SELECT PRODUCT CITATIONS**


