**BACKGROUND**

Retinoids (RA) are metabolites of vitamin A (retinol) that are important signaling molecules during vertebrate development and tissue differentiation. RAs activate the retinoic acid receptor (RAR) and retinoid X receptor (RXR) nuclear transcription factor families. Most retinoid forms activate RAR family members, whereas RXR family members are activated by 9-cis-RA only. RAR family members, which include RARα, RARβ and RARγ, have a high affinity for all transretinoic acids and belong to the same class of nuclear transcription factors as thyroid hormone receptors, vitamin D3 receptor and ecdysone receptor. RAR isomers are expressed in distinct patterns throughout development and in the mature organism. The human RARα gene maps to chromosome 17q21.2 and is implicated in the chromosomal translocation associated with acute promyelocytic leukemia (APL-M3). Specifically, the RARα gene is fused with the promyelocytic leukemia (PML) gene, which encodes the fusion protein PML/RARα. The PML/RARα fusion protein inhibits PML-dependent apoptotic pathways and halts myeloid differentiation at the promyelocytic stage.

**CHROMOSOMAL LOCATION**

Genetic locus: RARA (human) mapping to 17q21.2; Rara (mouse) mapping to chromosome 17q26.33.

**SOURCE**

RARα (C-1) is a mouse monoclonal antibody raised against amino acids 63-362 mapping within an internal region of RARα of human origin.

**PRODUCT**

Each vial contains 200 μg IgG1 kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

RARα (C-1) is available conjugated to agarose (sc-515796 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515796 HRP), 200 μg/ml, for WB, ICPi) and ELISA; to either phycocerythrin (sc-515796 PE), fluorescein (sc-515796 F1TC), Alexa Fluor® 488 (sc-515796 AF488), Alexa Fluor® 546 (sc-515796 AF546), Alexa Fluor® 594 (sc-515796 AF594) or Alexa Fluor® 647 (sc-515796 AF647), 200 μg/ml, for WB (RGB), IF, IHC (P) and FCM; and to either Alexa Fluor® 680 (sc-515796 AF680) or Alexa Fluor® 790 (sc-515796 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

RARα (C-1) is recommended for detection of RARα of mouse, rat and 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 RARα siRNA (h): sc-29465, RARα siRNA (m): sc-36393, RARα shRNA Plasmid (h): sc-29465-sh, RARα shRNA Plasmid (m): sc-36393-sh, RARα siRNA (h) Lentiviral Particles: sc-29465-V and RARα shRNA (m) Lentiviral Particles: sc-36393-V.

Molecular Weight of RARα: 52 kDa.

**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.