BACKGROUND

The active metabolite of vitamin D modulates the expression of a wide variety of genes in a developmentally specific manner. This secosteroid hormone can up- or downregulate the expression of genes involved in a diverse array of responses such as proliferation, differentiation and calcium homeostasis. 1,25-(OH)2-vitamin D3 exerts its effects through interaction with the vitamin D receptor (VDR), a member of the superfamily of hormone-activated nuclear receptors. In its ligand-bound state, the VDR forms heterodimers with the 9-cis retinoic acid receptor, RXR, and affects gene expression by binding specific DNA sequences known as hormone response elements, or HREs. In addition to regulating the above mentioned cellular responses, 1,25-(OH)2-vitamin D3 exhibits antiproliferative properties in osteosarcoma, melanoma, colon carcinoma and breast carcinoma cells.

CHROMOSOMAL LOCATION

Genetic locus: VDR (human) mapping to 12q13.11; Vdr (mouse) mapping to 15 F1.

SOURCE

VDR (H-81) is a rabbit polyclonal antibody raised against amino acids 344-424 of VDR of human origin.

PRODUCT

Each vial contains 200 µg 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-9164 X, 200 µg/0.1 ml.

APPLICATIONS

VDR (H-81) is recommended for detection of VDR 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)), 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).

VDR (H-81) is also recommended for detection of VDR in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for VDR siRNA (h): sc-106692, VDR siRNA (m): sc-36811, VDR shRNA Plasmid (h): sc-106692-SH, VDR shRNA Plasmid (m): sc-36811-SH, VDR shRNA (h) Lentiviral Particles: sc-106692-V and VDR shRNA (m) Lentiviral Particles: sc-36811-V.

VDR (H-81) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of VDR isoforms: 48/53 kDa.

Molecular Weight (observed) of VDR isoforms: 48-60 kDa.

Positive Controls: VDR (m): 293T Lysate: sc-124548, KNRK whole cell lysate: sc-2214 or T-47D cell lysate: sc-2293.

RESEARCH USE

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

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


Try VDR (D-6): sc-13133, our highly recommended monoclonal alternative to VDR (H-81). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see VDR (D-6): sc-13133.