



VDR (h): 293T Lysate: sc-178118

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.

REFERENCES

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4. Bikle, D.D. 1994. Role of vitamin D, its metabolites, and analogs in the management of osteoporosis. Rheum. Dis. Clin. North Am. 20: 759-775.
5. Mangelsdorf, D.J., et al. 1994. The retinoid receptors. In Sporn, M.B., et al, eds. The Retinoids: Biology, Chemistry, and Medicine. New York: Raven Press, Ltd., 319-349.
6. Whitfield, G.K., et al. 1995. Genomic actions of 1,25-dihydroxyvitamin D₃. J. Nutr. 125: 1690S-1694S.
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CHROMOSOMAL LOCATION

Genetic locus: VDR (human) mapping to 12q13.11.

PRODUCT

VDR (h): 293T Lysate represents a lysate of human VDR transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

VDR (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive VDR antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.