

## Basic Information

<b>Product Name</b>	Anti-VDR Antibody
<b>Gene Name</b>	VDR
<b>Source</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Species Reactivity</b>	human, mouse, rat
<b>Tested Application</b>	WB, FCM
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the C-terminus of human Vitamin D Receptor/VDR, which shares 88.9% amino acid (aa) sequence identity with mouse and rat VDR.
<b>Concentration</b>	500 ug/ml
<b>Purification</b>	Immunogen affinity purified.
<b>Observed MW</b>	60 kDa
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Flow Cytometry (Fixed):1:50-200

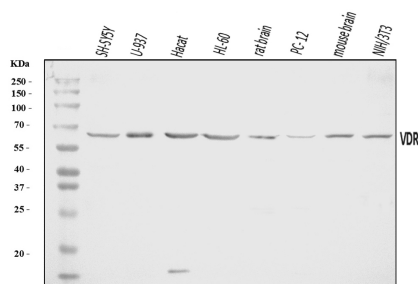
## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

VDR (Vitamin D Receptor), also known as Vitamin D Hormone Receptor, is a member of the nuclear receptor family of transcription factors. Labuda et al. (1991) assigned the VDR gene to 12q12-q14 by in situ hybridization. Using mutation analysis, Jurutka et al. (2000) characterized arg18/arg22, VDR residues immediately N-terminal of the first DNA-binding zinc finger, as vital for contact with the general transcription factor IIB (TFIIB). A natural polymorphic variant of VDR, termed F/M4 (missing a FokI restriction site), which lacks only the first 3 amino acids (including glu2), interacted more efficiently with TFIIB and also possessed elevated transcriptional activity compared with the full-length (f/M1) receptor. Shah et al. (2006) stated that the signaling and oncogenic activity of beta-catenin (CTNNB1) can be repressed by activation of VDR. Conversely, high levels of beta-catenin can potentiate the transcriptional activity of 1,25- dihydroxyvitamin D3.

## Selected Validation Data



Western blot analysis of VDR using anti-VDR antibody (A00210-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: SH-SY5Y whole cell lysates,

Lane 2: U-937 whole cell lysates,

Lane 3: Hacat whole cell lysates,

Lane 4: HL-60 whole cell lysates,

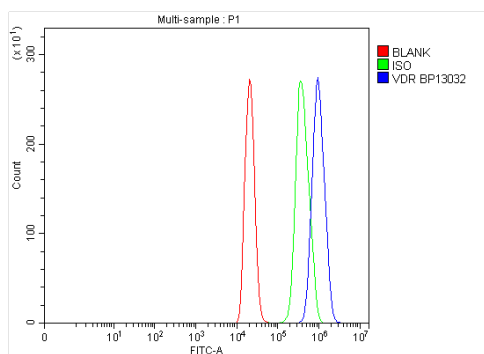
Lane 5: rat brain tissue lysates,

Lane 6: PC-12 whole cell lysates,

Lane 7: mouse brain tissue lysates,

Lane 8: NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-VDR antigen affinity purified polyclonal antibody (A00210-1) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for VDR at approximately 60 kDa. The expected band size for VDR is at 48 kDa.



Flow Cytometry analysis of C6 cells using anti-VDR antibody (A00210-1).

Overlay histogram showing C6 cells stained with A00210-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-VDR Antibody (A00210-1) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.