

## Anti-Vitamin D Receptor/VDR Antibody Picoband®

Catalog Number: A00210-1

### About VDR

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.

### Overview

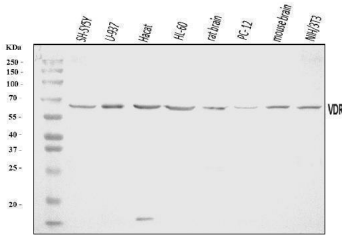
Product Name	Anti-Vitamin D Receptor/VDR Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Vitamin D Receptor/VDR Antibody Picoband® catalog # A00210-1. Tested in Flow Cytometry, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	P11473

### Technical Details

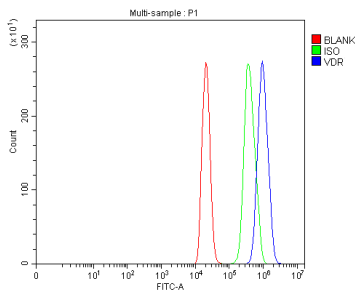
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Vitamin D Receptor/VDR, which shares 88.9% amino acid (aa) sequence identity with mouse and rat VDR.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat Flow Cytometry (Fixed), 1-3 ug/1x10 <sup>6</sup> cells, Human, Rat

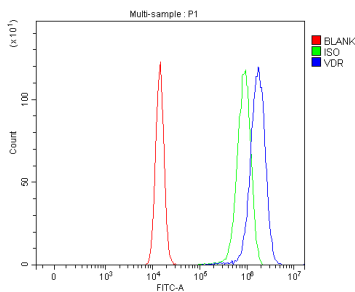
## Anti-Vitamin D Receptor/VDR Antibody Picoband® (A00210-1) Images



Western blot analysis of Vitamin D Receptor/VDR using anti-Vitamin D Receptor/VDR antibody (A00210-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human SH-SY5Y whole cell lysates, Lane 2: human U-937 whole cell lysates, Lane 3: human Hacat whole cell lysates, Lane 4: human HL-60 whole cell lysates, Lane 5: rat brain tissue lysates, Lane 6: rat PC-12 whole cell lysates, Lane 7: mouse brain tissue lysates, Lane 8: mouse NIH/3T3 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Vitamin D Receptor/VDR antigen affinity purified polyclonal antibody (Catalog # A00210-1) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Vitamin D Receptor/VDR at approximately 60 kDa. The expected band size for Vitamin D Receptor/VDR is at 60 kDa.



Flow Cytometry analysis of C6 cells using anti-Vitamin D Receptor/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-Vitamin D Receptor/VDR Antibody (A00210-1, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



Flow Cytometry analysis of U2OS cells using anti-Vitamin D Receptor/VDR antibody (A00210-1). Overlay histogram showing U2OS 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-Vitamin D Receptor/VDR Antibody (A00210-1, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was

rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions.  
Unlabelled sample without incubation with primary antibody  
and secondary antibody (Red line) was used as a blank  
control.

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Anti-Vitamin D Receptor/VDR Antibody

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