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**Product Name: VDR (phospho Ser51) Rabbit Polyclonal Antibody****Catalog #: APRab05619**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phosphorylated
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
<b>Molecular Weight</b>	38kDa

**Antigen Information**

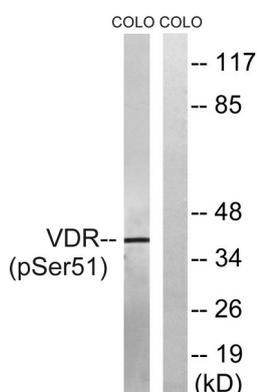
<b>Gene Name</b>	VDR
<b>Alternative Names</b>	VDR; NR111; Vitamin D3 receptor; VDR; 1; 25-dihydroxyvitamin D3 receptor; Nuclear receptor subfamily 1 group I member 1
<b>Gene ID</b>	7421.0
<b>SwissProt ID</b>	P11473
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Vitamin D3 Receptor around the phosphorylation site of Ser51. AA range:16-65

**Background**

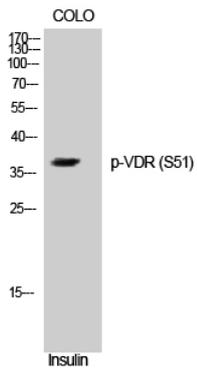
This gene encodes the nuclear hormone receptor for vitamin D3. This receptor also functions as a receptor for the secondary bile acid lithocholic acid. The receptor belongs to the family of trans-acting transcriptional regulatory factors and shows sequence similarity to the steroid and thyroid hormone receptors. Downstream targets of this nuclear hormone receptor are principally involved in mineral metabolism though the receptor regulates a variety of other metabolic pathways, such as those involved in the immune response and cancer. Mutations in this gene are associated with type II vitamin D-resistant rickets. A single nucleotide polymorphism in the initiation codon results in an alternate translation start site three codons downstream. Alternative splicing results in multiple transcript variants encoding different proteins. [provided by RefSeq, Feb 2011],caution:It is uncertain whether Met-1 or Met-4 is the initiator.,disease:Defects in VDR are the cause of type IIA rickets [MIM:277440]; also known as hypocalcemic vitamin D-resistant rickets (HVDRR). HVDRR is most frequently an autosomal recessive disorder characterized by severe rickets, hypocalcemia and secondary hyperparathyroidism.,domain:Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal steroid-binding domain.,function:Nuclear hormone receptor. Transcription factor that mediates the action of vitamin D3 by controlling the expression of hormone sensitive genes. Regulates transcription of hormone sensitive genes via its association with the WINAC complex, a chromatin-remodeling complex. Recruited to promoters via its interaction with the WINAC complex subunit BAZ1B/WSTF, which mediates the interaction with acetylated histones, an essential step for VDR-promoter association. Plays a central role in calcium homeostasis.,online information:The Singapore human mutation and polymorphism database,polymorphism:Genetic variations in VDR may determine Mycobacterium tuberculosis susceptibility [MIM:607948],similarity:Belongs to the nuclear hormone receptor family. NR1 subfamily.,similarity:Contains 1 nuclear receptor DNA-binding domain.,subunit:Homodimer in the absence of bound vitamin D3. Heterodimer with RXRA after vitamin D3 binding. Interacts with SMAD3. Interacts with MED1, NCOA1, NCOA2, NCOA3 and NCOA6 coactivators, leading to a strong increase of transcription of target genes. Interacts (in a ligand-dependent manner) with BAZ1B/WSTF.,

## Research Area

### Image Data



Western blot analysis of lysates from COLO205 cells treated with Insulin 0.01U/ml for 15 minutes, using Vitamin D3 Receptor (Phospho-Ser51) Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of COLO cells using Phospho-VDR ( S51 ) Polyclonal Antibody.