



# VDR (phospho Ser51) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-03284
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	VDR
<b>Protein Name</b>	Vitamin D3 receptor
<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
<b>Specificity</b>	Phospho-VDR (S51) Polyclonal Antibody detects endogenous levels of VDR protein only when phosphorylated at S51.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	VDR; NR111; Vitamin D3 receptor; VDR; 1; 25-dihydroxyvitamin D3 receptor; Nuclear receptor subfamily 1 group I member 1
<b>Observed Band</b>	38kD
<b>Cell Pathway</b>	Nucleus . Cytoplasm . Localizes mainly to the nucleus (PubMed:28698609, PubMed:12145331). Localization to the nucleus is enhanced by vitamin D3. .
<b>Tissue Specificity</b>	Lens epithelium,Peripheral blood,Placenta,Rectum,
<b>Function</b>	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

**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],

**matters needing attention**

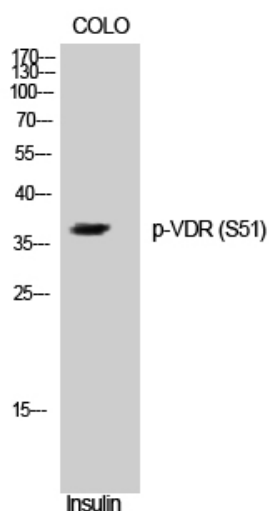
Avoid repeated freezing and thawing!

**Usage suggestions**

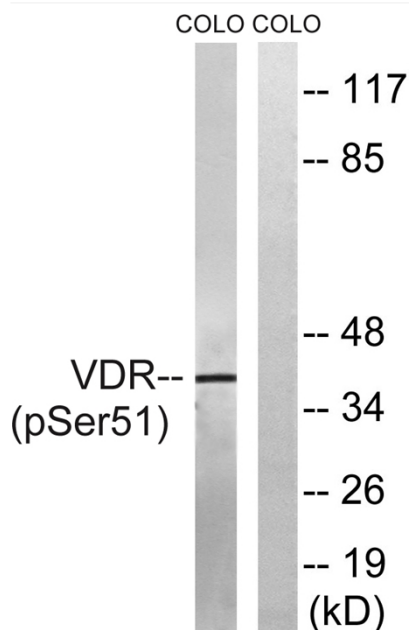
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



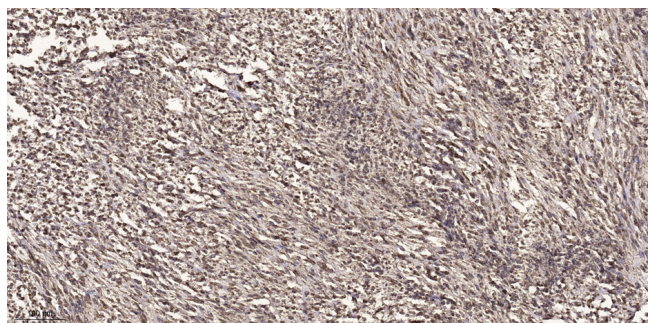
## Products Images



Western Blot analysis of COLO cells using Phospho-VDR (S51) Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



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



Immunohistochemical analysis of paraffin-embedded human small intestinal carcinoma tissue. 1, primary Antibody was diluted at 1:200 (4° overnight). 2, Sodium citrate pH 6.0 was used for antigen retrieval (>98° C, 20min). 3, Secondary antibody was diluted at 1:200