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VDR Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18415a

Specification

VDR Antibody - Product Information

Application	**WB,E**
Primary Accession	P11473
Other Accession	NP_000367.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**48289**

VDR Antibody - Additional Information

Gene ID 7421

Other Names
Vitamin D3 receptor, VDR, 25-dihydroxyvitamin D3 receptor, Nuclear receptor subfamily 1 group I member 1, VDR, NR1I1

Target/Specificity
This VDR antibody is generated from rabbits immunized with a recombinant protein of human VDR.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
VDR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

VDR Antibody - Protein Information

Name VDR (HGNC:12679)

Synonyms NR1I1

Function Nuclear receptor for calcitriol, the active form of vitamin D3 which mediates the action

of this vitamin on cells (PubMed:28698609, PubMed:16913708, PubMed:15728261, PubMed:10678179). Enters the nucleus upon vitamin D3 binding where it forms heterodimers with the retinoid X receptor/RXR (PubMed:28698609). The VDR-RXR heterodimers bind to specific response elements on DNA and activate the transcription of vitamin D3-responsive target genes (PubMed:28698609). Plays a central role in calcium homeostasis (By similarity). Also functions as a receptor for the secondary bile acid lithocholic acid (LCA) and its metabolites (PubMed:12016314, PubMed:32354638).

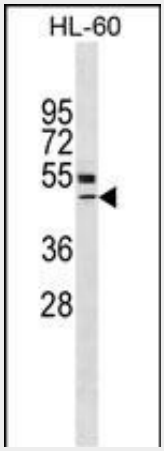
Cellular Location
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00407, ECO:0000269|PubMed:12145331, ECO:0000269|PubMed:16207705, ECO:0000269|PubMed:28698609}. Cytoplasm Note=Localizes mainly to the nucleus (PubMed:28698609, PubMed:12145331). Translocated into the nucleus via both ligand- dependent and ligand-independent pathways; ligand-independent nuclear translocation is mediated by IPO4 (PubMed:16207705)

VDR Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

VDR Antibody - Images



VDR Antibody (Cat. #AP18415a) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the VDR Antibody detected the VDR protein (arrow).

VDR Antibody - 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

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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 the same protein.

VDR Antibody - References

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Elnenaei, M.O., et al. Br. J. Nutr., 1-8 (2010) In press :
Forghani, N., et al. J. Pediatr. Endocrinol. Metab. 23(8):843-850(2010)
Alvarez-Nava, F., et al. J. Pediatr. Endocrinol. Metab. 23(8):773-782(2010)
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