

VDR Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AM2082b**Specification**

VDR Antibody - Product Information

Application	WB,E
Primary Accession	P11473
Other Accession	NP_000367.1
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgA
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

Purified His-tagged VDR protein(Fragment) was used to produced this monoclonal antibody.

Dilution

WB~~1:2000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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:[10678179](#), PubMed:[15728261](#), PubMed:[16913708](#), PubMed:[28698609](#), PubMed:[37478846](#)). 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

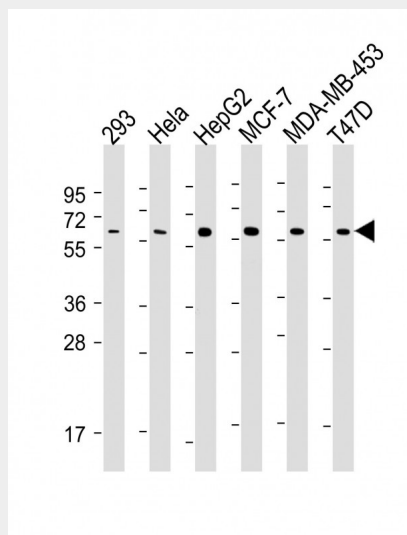
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00407, ECO:0000269|PubMed:12145331, ECO:0000269|PubMed:16207705, ECO:0000269|PubMed:28698609}. Cytoplasm Note=Localizes mainly to the nucleus (PubMed:12145331, PubMed:28698609). Translocated into the nucleus via both ligand- dependent and ligand-independent pathways; 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 Cytometry](#)
- [Cell Culture](#)

VDR Antibody - Images



All lanes : Anti-VDR Antibody at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: HeLa whole cell lysate Lane 3: HepG2 whole cell lysate Lane 4: MCF-7 whole cell lysate Lane 5: MDA-MB-453 whole cell lysate Lane 6: T47D whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 55 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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 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

An, B.S., et al. Mol. Cell. Biol. 30(20):4890-4900(2010)
Elneaei, 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)
Jurutka, P.W., et al. Proc. Natl. Acad. Sci. U.S.A. 93(8):3519-3524(1996)