

Anti-Vitamin D Receptor VDR Rabbit Monoclonal Antibody

Catalog # ABO14260

Product Information

Application	WB, IP
Primary Accession	P11473
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Vitamin D Receptor VDR Rabbit Monoclonal Antibody . Tested in WB, IP applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	7421
Other Names	Vitamin D3 receptor, VDR, 1, 25-dihydroxyvitamin D3 receptor, Nuclear receptor subfamily 1 group I member 1, VDR (HGNC:12679), NR1I1
Calculated MW	48289
Application Details	WB 1:500-1:2000 IP 1:50
Subcellular Localization	Nucleus.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: AAGE-22
Immunogen	A synthesized peptide derived from human Vitamin D Receptor
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	VDR (HGNC:12679)
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Synonyms

NR1I1

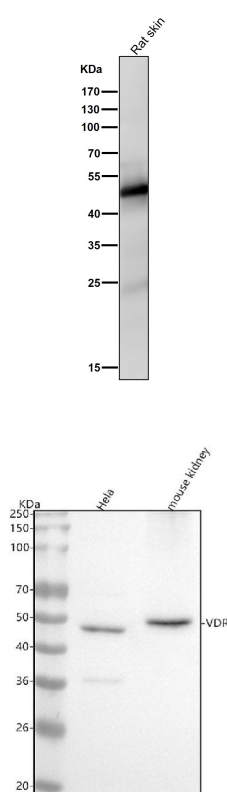
Function

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)

Images



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.

Figure 1. Western blot analysis of VDR using anti-VDR antibody (M00210).

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 Hela whole cell lysates,

Lane 2: mouse kidney tissue 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-VDR antigen affinity purified monoclonal antibody (Catalog # M00210) at 1:500 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 VDR at approximately 48 kDa. The expected band size for VDR is at 48 kDa.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.