

Anti-VDR Picoband Antibody
Catalog # ABO12145**Specification**

Anti-VDR Picoband Antibody - Product Information

Application	WB, IHC
Primary Accession	P11473
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Vitamin D3 receptor(VDR) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-VDR Picoband Antibody - 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, NR1I1

Calculated MW

48289 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization

Nucleus.

Protein Name

Vitamin D3 receptor

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human VDR (377-402aa HLLYAKMIQKLADLRSLNEEHKQYR), different from the related mouse and rat sequences by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the nuclear hormone receptor family. NR1 subfamily.

Anti-VDR Picoband 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](http://www.uniprot.org/citations/28698609), PubMed: [16913708](http://www.uniprot.org/citations/16913708), PubMed: [15728261](http://www.uniprot.org/citations/15728261), PubMed: [10678179](http://www.uniprot.org/citations/10678179)). Enters the nucleus upon vitamin D3 binding where it forms heterodimers with the retinoid X receptor/RXR (PubMed: [28698609](http://www.uniprot.org/citations/28698609)). The VDR-RXR heterodimers bind to specific response elements on DNA and activate the transcription of vitamin D3-responsive target genes (PubMed: [28698609](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/12016314), PubMed: [32354638](http://www.uniprot.org/citations/32354638)).

Cellular Location

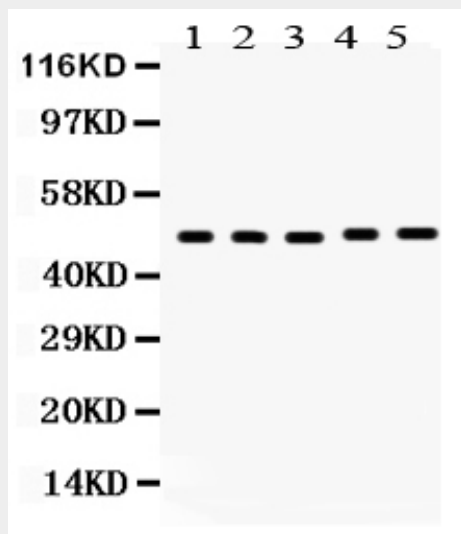
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00407, ECO:0000269|PubMed:12145331, ECO:0000269|PubMed:16207705, ECO:0000269|PubMed:28698609}. Cytoplasm Note=Localizes mainly to the nucleus (PubMed:28698609, PubMed:12145331). Translocated into the nucleus via both ligand- dependent and ligand-independent pathways;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

Anti-VDR Picoband Antibody - Protocols

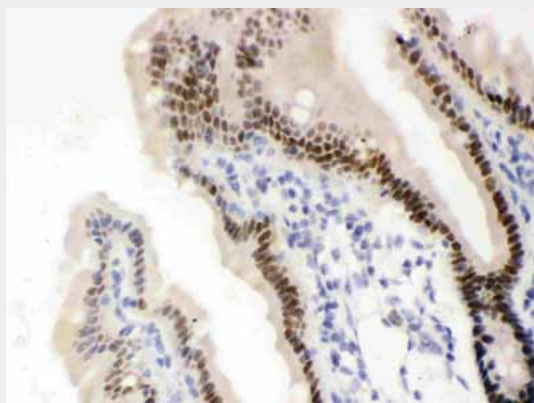
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

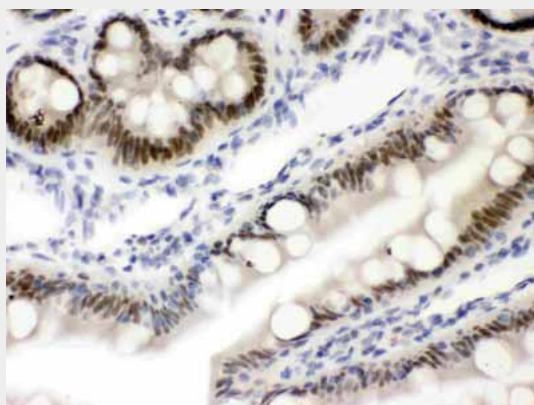
Anti-VDR Picoband Antibody - Images



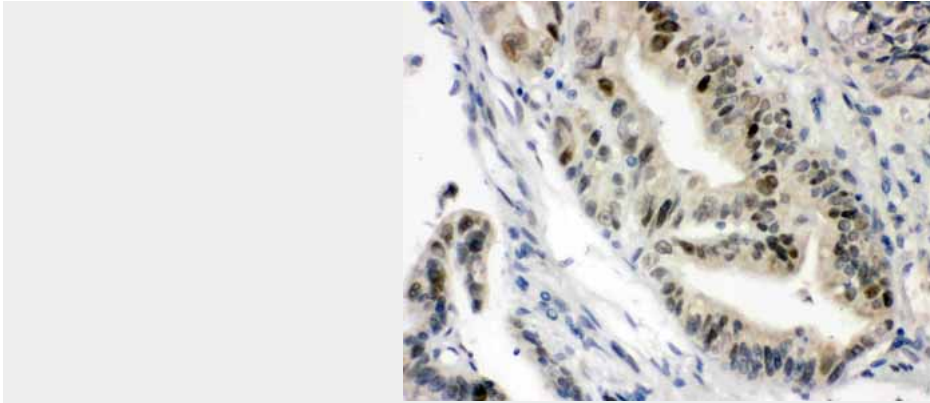
Anti-VDR Picoband antibody, ABO12145, Western blotting
All lanes: Anti VDR (ABO12145) at 0.5ug/ml
Lane 1: Human Placenta Tissue Lysate at 50ug
Lane 2: Rat Kidney Tissue Lysate at 50ug
Lane 3: Rat Liver Tissue Lysate at 50ug
Lane 4: Rat Pancreas Tissue Lysate at 50ug
Lane 5: HELA Whole Cell Lysate at 40ug
Predicted bind size: 48KD
Observed bind size: 48KD



Anti-VDR Picoband antibody, ABO12145, IHC(P) IHC(P): Mouse Intestine Tissue



Anti-VDR Picoband antibody, ABO12145, IHC(P) IHC(P): Rat Intestine Tissue



Anti-VDR Picoband antibody, ABO12145, IHC(P)IHC(P): Human Intestinal Cancer Tissue

Anti-VDR Picoband Antibody - Background

VDR (Vitamin D Receptor), also known as Vitamin D Hormone Receptor, is a member of the nuclear receptor family of transcription factors. Labuda et al. (1991) assigned the VDR gene to 12q12-q14 by in situ hybridization. Using mutation analysis, Jurutka et al. (2000) characterized arg18/arg22, VDR residues immediately N-terminal of the first DNA-binding zinc finger, as vital for contact with the general transcription factor IIB (TFIIB). A natural polymorphic variant of VDR, termed F/M4 (missing a FokI restriction site), which lacks only the first 3 amino acids (including glu2), interacted more efficiently with TFIIB and also possessed elevated transcriptional activity compared with the full-length (f/M1) receptor. Shah et al. (2006) stated that the signaling and oncogenic activity of beta-catenin (CTNNB1) can be repressed by activation of VDR. Conversely, high levels of beta-catenin can potentiate the transcriptional activity of 1,25- dihydroxyvitamin D3.