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# Anti-VDR Antibody

Catalog # AP59729

## Product Information

| | |
|---|---|
| **Application** | WB, IHC, IF/IC |
| **Primary Accession** | P11473 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 48289 |

## Additional Information

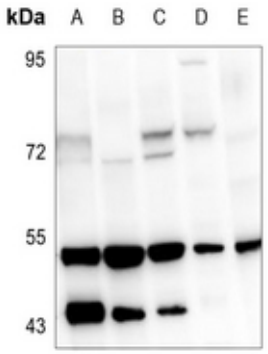
| | |
|---|---|
| **Gene ID** | 7421 |
| **Other Names** | NR1I1; Vitamin D3 receptor; VDR; 1, 25-dIHCydroxyvitamin D3 receptor; Nuclear receptor subfamily 1 group I member 1 |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human VDR. The exact sequence is proprietary. |
| **Dilution** | WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## Protein Information

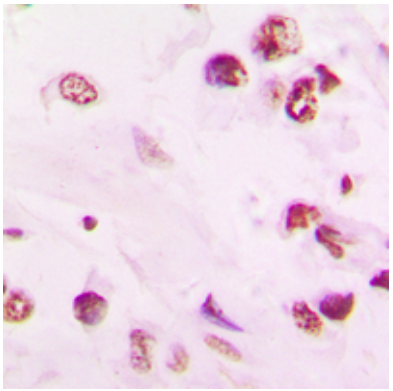
| | |
|---|---|
| **Name** | VDR ( HGNC:12679) |
| **Synonyms** | NR1I1 |
| **Function** | Nuclear receptor for calcitriol, the active form of vitamin D3 which mediates the action of this vitamin on cells (PubMed:10678179, PubMed:15728261, PubMed:16913708, PubMed:28698609, PubMed:37478846). Enters the 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)

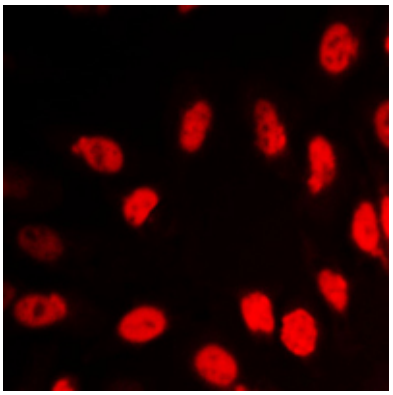
## Images




Western blot analysis of VDR expression in HCT116 (A), HEK293T (B), A549 (C), CT26 (D), PC12 (E) whole cell lysates. (Predicted band size: 48; 53 kD; Observed band size: 54; 48 kD)

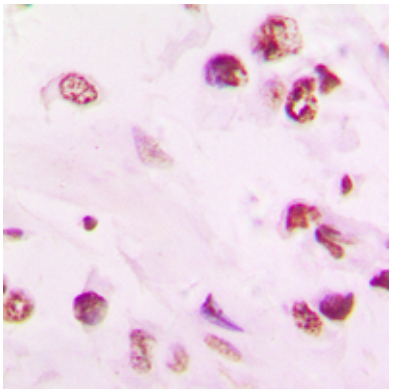


Immunohistochemical analysis of VDR staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of VDR staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Immunohistochemical analysis of VDR staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



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