

**Vitamin D Receptor / VDR Antibody (clone 2F4)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS13424****Specification**

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**Vitamin D Receptor / VDR Antibody (clone 2F4) - Product Information**

Application	IHC
Primary Accession	<a href="#">P11473</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	48kDa KDa

**Vitamin D Receptor / VDR Antibody (clone 2F4) - 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

**Reconstitution & Storage**

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

**Precautions**

Vitamin D Receptor / VDR Antibody (clone 2F4) is for research use only and not for use in diagnostic or therapeutic procedures.

**Vitamin D Receptor / VDR Antibody (clone 2F4) - 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](http://www.uniprot.org/citations/10678179)), PubMed:[15728261](http://www.uniprot.org/citations/15728261)), PubMed:[16913708](http://www.uniprot.org/citations/16913708)), PubMed:[28698609](http://www.uniprot.org/citations/28698609)), PubMed:[37478846](http://www.uniprot.org/citations/37478846)). 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:<a href="http://www.uniprot.org/citations/12016314" target="\_blank">12016314</a>, PubMed:<a href="http://www.uniprot.org/citations/32354638" target="\_blank">32354638</a>).

#### Cellular Location

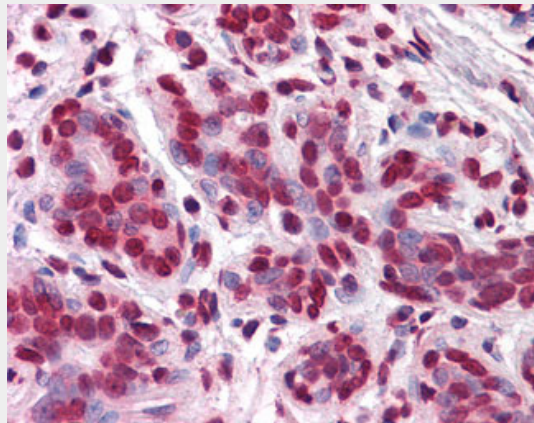
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00407, ECO:0000269|PubMed:12145331, ECO:0000269|PubMed:16207705, ECO:0000269|PubMed:28698609}. Cytoplasm Note=Localizes mainly to the nucleus (PubMed:12145331, PubMed:28698609). Translocated into the nucleus via both ligand- dependent and ligand-independent pathways;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

#### Vitamin D Receptor / VDR Antibody (clone 2F4) - 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](#)

#### Vitamin D Receptor / VDR Antibody (clone 2F4) - Images



Anti-VDR antibody IHC of human breast.

#### Vitamin D Receptor / VDR Antibody (clone 2F4) - Background

Nuclear hormone receptor. Transcription factor that mediates the action of vitamin D3 by controlling the expression of hormone sensitive genes. Regulates transcription of hormone sensitive genes via its association with the WINAC complex, a chromatin-remodeling complex. Recruited to promoters via its interaction with the WINAC complex subunit BAZ1B/WSTF, which mediates the interaction with acetylated histones, an essential step for VDR-promoter association. Plays a central role in calcium homeostasis.

#### Vitamin D Receptor / VDR Antibody (clone 2F4) - References

Baker A.R., et al. Proc. Natl. Acad. Sci. U.S.A. 85:3294-3298(1988).  
Goto H., et al. Biochim. Biophys. Acta 1132:103-108(1992).

Rae J.L.,et al.Submitted (SEP-1997) to the EMBL/GenBank/DDBJ databases.  
Miyamoto K.,et al.Mol. Endocrinol. 11:1165-1179(1997).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).