

Goat Anti-VDR Antibody
Peptide-affinity purified goat antibody
Catalog # AF2145a

Specification

Goat Anti-VDR Antibody - Product Information

Application	WB
Primary Accession	P11473
Other Accession	NP_001017535 , 7421 , 22337 (mouse) , 24873 (rat)
Reactivity	Human, Mouse, Rat
Predicted	Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5mg/ml
Isotype	IgG
Calculated MW	48289

Goat Anti-VDR 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

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-VDR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-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:

target="_blank">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)

Goat Anti-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](#)

Goat Anti-VDR Antibody - Images



AF2145a (0.3 µg/ml) staining of Human Brain lysate (35 µg protein in RIPA buffer). Primary

incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-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.

Goat Anti-VDR Antibody - References

[Effect of TT genotype of the vitamin D receptor gene on bone mineral density in dialysis patients] . Ter Arkh, 2010. PMID 20731109.
Genomic and metabolomic patterns segregate with responses to calcium and vitamin D supplementation. Elnenaie MO, et al. Br J Nutr, 2010 Aug 23. PMID 20727239.
Polymorphisms within exon 9 but not intron 8 of the vitamin D receptor are associated with the nephropathic complication of type-2 diabetes. Nosratabadi R, et al. Int J Immunogenet, 2010 Aug 19. PMID 20727043.
Vitamin D receptor genetic variants among patients with end-stage renal disease. Tripathi G, et al. Ren Fail, 2010. PMID 20722565.
Clinical and Genetic Predictors of Response to Narrowband UVB for the Treatment of Chronic Plaque Psoriasis. Ryan C, et al. Br J Dermatol, 2010 Aug 13. PMID 20716226.