

VDR Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP14793c**Specification**

VDR Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P11473](#)**VDR Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 7421**Other Names**

Vitamin D3 receptor, VDR, 25-dihydroxyvitamin D3 receptor, Nuclear receptor subfamily 1 group I member 1, VDR, NR1I1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

VDR Antibody (Center) Blocking Peptide - 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, PubMed:16913708, PubMed:15728261, PubMed:10678179). 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: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)

VDR Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

VDR Antibody (Center) Blocking Peptide - Images**VDR Antibody (Center) Blocking Peptide - 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.

VDR Antibody (Center) Blocking Peptide - References

An, B.S., et al. Mol. Cell. Biol. 30(20):4890-4900(2010) Elneaei, M.O., et al. Br. J. Nutr., 1-8 (2010) In press :Forghani, N., et al. J. Pediatr. Endocrinol. Metab. 23(8):843-850(2010) Alvarez-Nava, F., et al. J. Pediatr. Endocrinol. Metab. 23(8):773-782(2010) Jurutka, P.W., et al. Proc. Natl. Acad. Sci. U.S.A. 93(8):3519-3524(1996)