10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

VDR Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP14793c

Specification

VDR Antibody (Center) Blocking Peptide - Product Information

Primary 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 vitaminD3. This receptor also functions as a receptor for the secondarybile acid lithocholic acid. The receptor belongs to the family oftrans-acting transcriptional regulatory factors and shows sequencesimilarity to the steroid and thyroid hormone receptors. Downstreamtargets of this nuclear hormone receptor are principally involvedin mineral metabolism though the receptor regulates a variety ofother metabolic pathways, such as those involved in the immuneresponse and cancer. Mutations in this gene are associated withtype II vitamin D-resistant rickets. A single nucleotidepolymorphism in the initiation codon results in an alternatetranslation start site three codons downstream. Alternativesplicing results in multiple transcript variants encoding the sameprotein.

VDR Antibody (Center) Blocking Peptide - References

An, B.S., et al. Mol. Cell. Biol. 30(20):4890-4900(2010)Elnenaei, 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)