# Recombinant Human VDR, His-tagged

**Cat. No.** VDR-2560H **Lot. No.** (See product label)

## SPECIFICATION

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| **Product Overview** | Recombinant Human VDR (Met 1-Ser 427) fused with a polyhistidine tag at the C-terminus, was expressed in Baculovirus-Insect cells. |
| **Species** | Human |
| **Source** | Insect Cells |
| **ProteinLength** | 1-427 a.a. |
| **Description** | 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 different proteins. |
| **Molecular Mass** | The recombinant human VDR consists of 437 amino acids and migrates as an approximately 50 KDa band in SDS-PAGE in SDS-PAGE under reducing conditions as predicted. |
| **Predicted N terminal** | Met 1 |

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| **Purity** | > 88 % as determined by SDS-PAGE |
| **Endotoxin** | < 1.0 EU per μg of the protein as determined by the LAL method |
| **Formulation** | Lyophilized from sterile 50mM Tris,100mM NaCl, pH 8.0, 10%glycerol |
| **Storage** | Store it under sterile conditions at -70°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. |
| **OfficialSymbol** | VDR |

## GENE INFORMATION

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| **Gene Name** | VDR vitamin D (1,25-dihydroxyvitamin D3) receptor [ Homo sapiens ] |
| **Synonyms** | VDR; vitamin D (1,25-dihydroxyvitamin D3) receptor; NR1I1; 1,25-dihydroxyvitamin D3 receptor; Nuclear receptor subfamily 1 group I member 1; vitamin D nuclear receptor variant 1; vitamin D3 receptor |
| **Gene ID** | 7421 |
| **mRNA Refseq** | NM_000376 |
| **Protein Refseq** | NP_000367 |
| **MIM** | 601769 |
| **UniProt ID** | P11473 |
| **Chromosome Location** | 12q13.11 |

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| **Pathway** | Gene Expression; Direct p53 effectors; Drug Induction of Bile Acid Pathway |
| **Function** | protein binding; retinoid X receptor binding; sequence-specific DNA binding; steroid hormone receptor activity; transcription factor activity; vitamin D response element binding; vitamin D3 receptor activity; zinc ion binding |
| **PDB rendering basedon 1kb2.** |  |

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