Vitamin D Receptor/VDR Protein, Human (sf9, His)

Cat. No.:	HY-P73543
Synonyms:	Vitamin D3 receptor; VDR; NR1I1
Species:	Human
Source:	Sf9 insect cells
Accession:	P11473 (M1-S427)
Gene ID:	7421
Molecular Weight:	Approximately 50 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of 50 mM Tris, 100 mM NaCl, pH 8.0, 10% Glycerol. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	The Vitamin D Receptor (VDR) functions as a nuclear receptor for calcitriol, the active form of vitamin D3, mediating its cellular effects. Upon binding to vitamin D3, VDR translocates to the nucleus and forms heterodimers with the retinoid X receptor (RXR). These VDR-RXR heterodimers bind to specific response elements on DNA, activating the transcription of target genes responsive to vitamin D3. Beyond its role in calcium homeostasis, VDR also serves as a receptor for the secondary bile acid lithocholic acid (LCA) and its metabolites. In the absence of bound vitamin D3, VDR exists as a homodimer, and upon binding, it forms a heterodimer with RXRA. VDR interacts with various coactivators, including MED1, NCOA1, NCOA2, NCOA3, and NCOA6, leading to increased transcription of target genes. Additionally, VDR interacts with the corepressor NCOR1 and SNW1. It forms ligand-dependent interactions with CRY1 and CRY2, and also interacts with IRX4 without affecting its transactivation activity.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA