

**Recombinant Human VDR / NR1I1 Protein (His tag)**

**Cat.NO.: TP06866**

3th Edition

**Synonyms:**NR1I1;PPP1R163

**Description:**VDR (vitamin D(1,25- dihydroxyvitamin D3)receptor), also known as NR1I1, belongs to the NR1I family, NR1 subfamily. It is composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal ligand-binding domain. Vitamin D receptors (VDRs) are members of the NR1I family, which also includes pregnane X (PXR) and constitutive androstane (CAR) receptors, that form heterodimers with members of the retinoid X receptor family. VDRs repress expression of 1 $\alpha$ -hydroxylase (the proximal activator of 1,25(OH)2D3) and induce expression of the 1,25(OH)2D3 inactivating enzyme CYP24. Also, it has recently been identified as an additional bile acid receptor alongside FXR and may function to protect gut against the toxic and carcinogenic effects of these endobiotics. VDR is expressed in the intestine, thyroid and kidney and has a vital role in calcium homeostasis. It is the nuclear hormone receptor, also called transcription factor that mediates the action of vitamin D3. Inherited mutations in the VDR gene leads to rickets.

**Form:**PBS

**Molecular Weight:**50 KDa

**Sequences:**Met 1-Ser 427

**Purity:**> 95% by HPLC

**Concentration:**

**Endotoxin Level:**<1.0 EU per 1  $\mu$ g of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.