Recombinant Protein Technical Manual

Recombinant Human VDR/NR1I1 Protein (His Tag)

RPES4102

Product Data:

Product SKU: RPES4102

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: P11473

Protein Information:

Molecular Mass: 50 KDa

AP Molecular Mass: 50 kDa

Tag: C-His

Bio-activity:

Purity: > 88 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 50mM Tris, 100mM NaCl, pH 8.0, 10% glycerol

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: NR1I1;PPP1R163

Immunogen Information:

Sequence: Met 1-Ser 427

Background:

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 1alpha-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.