

Product datasheet for **AM20955PU-N**

Vitamin D Receptor (VDR) Mouse Monoclonal Antibody [Clone ID: 2F4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	2F4
Applications:	ELISA, IHC
Recommended Dilution:	ELISA. Immunohistochemistry on Paraffin Sections: 5 µg/ml.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Recombinant protein, VDR (AAH60832, 1 a.a. ~ 428 a.a) full length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Specificity:	This antibody reacts to Vitamin D Receptor (VDR).
Formulation:	PBS, pH 7.2 State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Protein A Chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	vitamin D (1,25- dihydroxyvitamin D3) receptor
Database Link:	Entrez Gene 7421 Human P11473



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Background:

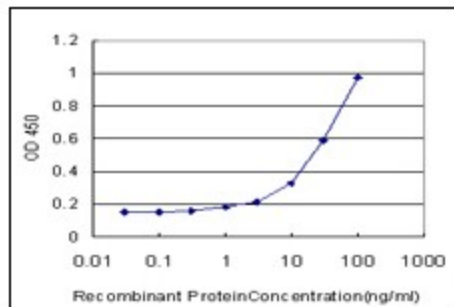
The vitamin D receptor, a NR1 Thyroid Hormone-Like Receptor, is activated by calcitriol, the active hormonal form of vitamin D. The activated receptor binds DNA at a specific vitamin D-responsive element and promotes transcription of vitamin D target genes such as osteocalcin, the most abundant noncollagenous protein in bone. The vitamin D receptor affects growth, bone formation, and female reproduction. For example, this receptor modulates the growth and differentiation of keratinocytes and mediates the beneficial effects of vitamin D on psoriatic skin. It also inhibits hormone secretion by and proliferation of parathyroid cells. The vitamin D receptor functions either as a homodimer or as a heterodimer of vitamin D and retinoid acid X receptor subunits. Inactivation of the receptor leads to hypocalcemia and Rickets-alopecia syndrome. Recently, the vitamin D receptor has been shown to function as a receptor for the secondary bile acid lithocholic acid (LCA), which is hepatotoxic and a potential enteric carcinogen. Activation of VDR by LCA or vitamin D induced expression in vivo of CYP3A, a cytochrome P450 enzyme that detoxifies LCA in the liver and intestine. An alternatively spliced vitamin D receptor that has an altered ligand-binding domain has been isolated from rats.

Synonyms:

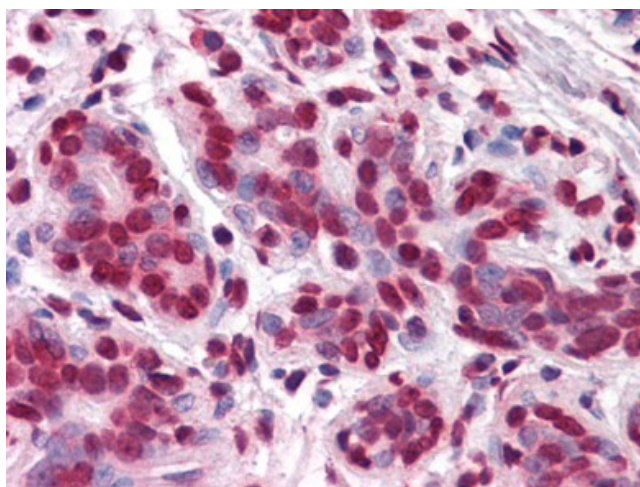
VDR, 1,25-dihydroxyvitamin D3 receptor

Protein Families:

Druggable Genome, Nuclear Hormone Receptor, Transcription Factors

Product images:

Detection limit for recombinant GST tagged VDR is approximately 1 ng/ml as a capture antibody.



Human Breast: Formalin-Fixed, Paraffin-Embedded (FFPE)