

Product datasheet for SC329406

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Vitamin D Receptor (VDR) (NM_001017536) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Vitamin D Receptor (VDR) (NM_001017536) Human Untagged Clone

Tag: Tag Free

Symbol: Vitamin D Receptor
Synonyms: NR111; PPP1R163

Vector: pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC329406 representing NM_001017536.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGGAGTGGAGGAATAAGAAAAGGAGCGATTGGCTGTCGATGGTGCTCAGAACTGCTGGAGTGGAGGAA GCCTTTGGGTCTGAAGTGTCTGTGAGACCTCACAGAAGAGCACCCCTGGGCTCCACTTACCTGCCCCCT GTGCCCCGGATCTGTGGGGTGTGTGGAGACCGAGCCACTGGCTTTCACTTCAATGCTATGACCTGTGAA GGCTGCAAAGGCTTCTTCAGGCGAAGCATGAAGCGGAAGGCACTATTCACCTGCCCCTTCAACGGGGAC TGCCGCATCACCAAGGACAACCGACGCCACTGCCAGGCCTGCCGGCTCAAACGCTGTGTGGACATCGGC ATGATGAAGGAGTTCATTCTGACAGATGAGGAAGTGCAGAGGAAGCGGGAGATGATCCTGAAGCGGAAG GAGGAGGAGGCCTTGAAGGACAGTCTGCGGCCCAAGCTGTCTGAGGAGCAGCAGCAGCATCATTGCCATA CTGCTGGACGCCCACCATAAGACCTACGACCCCACCTACTCCGACTTCTGCCAGTTCCGGCCTCCAGTT CGTGTGAATGATGGTGGAGGGAGCCATCCTTCCAGGCCCAACTCCAGACACACTCCCAGCTTCTCTGGG GACTCCTCCTCCTCCTCAGATCACTGTATCACCTCTTCAGACATGATGGACTCGTCCAGCTTCTCC AATCTGGATCTGAGTGAAGAAGATTCAGATGACCCTTCTGTGACCCTAGAGCTGTCCCAGCTCTCCATG CTGCCCCACCTGGCTGACCTGGTCAGTTACAGCATCCAAAAGGTCATTGGCTTTGCTAAGATGATACCA GGATTCAGAGACCTCACCTCTGAGGACCAGATCGTACTGCTGAAGTCAAGTGCCATTGAGGTCATCATG TTGCGCTCCAATGAGTCCTTCACCATGGACGACATGTCCTGGACCTGTGGCAACCAAGACTACAAGTAC CGCGTCAGTGACCTGACCAAAGCCGGACACAGCCTGGAGCTGATTGAGCCCCTCATCAAGTTCCAGGTG GGACTGAAGAAGCTGAACTTGCATGAGGAGGAGCATGTCCTGCTCATGGCCATCTGCATCGTCTCCCCA GATCGTCCTGGGGTGCAGGACGCCGCGCTGATTGAGGCCATCCAGGACCGCCTGTCCAACACACTGCAG ACGTACATCCGCTGCCGCCCCCCGGGCAGCCACCTGCTCTATGCCAAGATGATCCAGAAGCTA GCCGACCTGCGCAGCCTCAATGAGGAGCACTCCAAGCAGTACCGCTGCCTCTCCTTCCAGCCTGAGTGC AGCATGAAGCTAACGCCCCTTGTGCTCGAAGTGTTTGGCAATGAGATCTCCTGA

Restriction Sites: Sgfl-Mlul

ACCN: NM 001017536

Insert Size: 1434 bp





OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>

Components:

Cytogenetics:

The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

- 1. Centrifuge at 5,000xg for 5min.
- 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
- 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: <u>NM 001017536.1</u>

12q13.11

 RefSeq Size:
 5060 bp

 RefSeq ORF:
 1434 bp

 Locus ID:
 7421

 UniProt ID:
 P11473

Protein Families: Druggable Genome, Nuclear Hormone Receptor, Transcription Factors

MW: 53.9 kDa



Gene Summary:

This gene encodes vitamin D3 receptor, which is a member of the nuclear hormone receptor superfamily of ligand-inducible transcription factors. This receptor also functions as a receptor for the secondary bile acid, lithocholic acid. Downstream targets of vitamin D3 receptor are principally involved in mineral metabolism, though this receptor regulates a variety of other metabolic pathways, such as those involved in 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. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. A recent study provided evidence for translational readthrough in this gene, and expression of an additional C-terminally extended isoform via the use of an alternative in-frame translation termination codon. [provided by RefSeq, Jun 2018]

Transcript Variant: This variant (3) is alternatively spliced at the 5' end, resulting in translation initiation at an in-frame upstream start codon, compared to variant 1. The encoded isoform (VDRB1) has a longer and distinct N-terminus compared to isoform VDRA. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.