

Product datasheet for KN209262LP

OriGene Technologies, Inc.

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Vitamin D Receptor (VDR) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control

Donor DNA: Luciferase-Puro

Symbol: Vitamin D Receptor

Locus ID: 7421

Components: KN209262G1, Vitamin D Receptor gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN209262G2, Vitamin D Receptor gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN209262LPD**, donor DNA containing left and right homologous arms and Luciferase-Puro

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

RefSeq: <u>NM 000376, NM 001017535, NM 001017536, NM 001364085</u>

UniProt ID: P11473

Synonyms: NR1I1; PPP1R163

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

isoforms have been described for this gene. A recent study provided evidence for

nucleotide polymorphism in the initiation codon results in an alternate translation start site three codons downstream. Alternatively spliced transcript variants encoding different

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

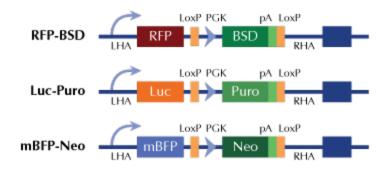
RefSeq, Jun 2018]





Product images:

Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter