

## Product datasheet for RC226201L1V

## OriGene Technologies, Inc.

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## HMGCR (NM\_001130996) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

Product Type: Lentiviral Particles

**Product Name:** HMGCR (NM\_001130996) Human Tagged ORF Clone Lentiviral Particle

Symbol: HMGCR
Synonyms: LDLCQ3

Mammalian Cell

Selection:

None

**Vector:** pLenti-C-Myc-DDK (PS100064)

Tag: Myc-DDK

**ACCN:** NM\_001130996

ORF Size: 2505 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC226201).

Sequence:

OTI Disclaimer: 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. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**RefSeq:** NM 001130996.1, NP 001124468.1

 RefSeq ORF:
 2508 bp

 Locus ID:
 3156

 UniProt ID:
 P04035

 Cytogenetics:
 5q13.3

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Metabolic pathways, Terpenoid backbone biosynthesis

**MW:** 91.8 kDa







## **Gene Summary:**

HMG-CoA reductase is the rate-limiting enzyme for cholesterol synthesis and is regulated via a negative feedback mechanism mediated by sterols and non-sterol metabolites derived from mevalonate, the product of the reaction catalyzed by reductase. Normally in mammalian cells this enzyme is suppressed by cholesterol derived from the internalization and degradation of low density lipoprotein (LDL) via the LDL receptor. Competitive inhibitors of the reductase induce the expression of LDL receptors in the liver, which in turn increases the catabolism of plasma LDL and lowers the plasma concentration of cholesterol, an important determinant of atherosclerosis. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2008]