

## **Product datasheet for KN200006RB**

#### OriGene Technologies, Inc.

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### LDL Receptor (LDLR) Human Gene Knockout Kit (CRISPR)

#### **Product data:**

**Product Type:** Knockout Kits (CRISPR)

**Format:** 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

**Donor DNA:** RFP-BSD

Symbol: LDL Receptor

**Locus ID:** 3949

**Components:** KN200006G1, LDL Receptor gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN200006G2**, LDL Receptor gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN200006RBD**, donor DNA containing left and right homologous arms and RFP-BSD

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

**Disclaimer:** These products are manufactured and supplied by OriGene under license from ERS. The kit is

designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the

experimental process.

RefSeq: NM 000527, NM 001195798, NM 001195799, NM 001195800, NM 001195802,

NM 001195803

UniProt ID: P01130

**Synonyms:** FH; FHC; LDLCQ2

**Summary:** The low density lipoprotein receptor (LDLR) gene family consists of cell surface proteins

involved in receptor-mediated endocytosis of specific ligands. Low density lipoprotein (LDL) is normally bound at the cell membrane and taken into the cell ending up in lysosomes where the protein is degraded and the cholesterol is made available for repression of microsomal enzyme 3-hydroxy-3-methylglutaryl coenzyme A (HMG CoA) reductase, the rate-limiting step in cholesterol synthesis. At the same time, a reciprocal stimulation of cholesterol ester synthesis takes place. Mutations in this gape cause the autosomal deminant disorder familial

synthesis takes place. Mutations in this gene cause the autosomal dominant disorder, familial hypercholesterolemia. Alternate splicing results in multiple transcript variants.[provided by

RefSeq, Sep 2010]





# **Product images:**

#### Donor Vector Edited Chromosome



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