

## **Product datasheet for KN211462RB**

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## **DEPDC5 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: DEPDC5 Locus ID: 9681

**Components: KN211462G1**, DEPDC5 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN211462G2**, DEPDC5 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN211462RBD, 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 001007188, NM 001136029, NM 001242896, NM 001242897, NM 014662, NR 110988,

NR 146296, NM 001364318, NM 001364320, NM 001369902, NM 001369903, NR 157126, NR 157128, NM 001363852, NM 001363854, NM 001364319, NM 001369901, NR 157125

UniProt ID: 075140

Synonyms: DEP.5; FFEVF

**Summary:** This gene encodes a member of the IML1 family of proteins involved in G-protein signaling

pathways. The mechanistic target of rapamycin complex 1 (mTORC1) pathway regulates cell

growth by sensing the availability of nutrients. The protein encoded by this gene is a

component of the GATOR1 (GAP activity toward Rags) complex which inhibits the amino acid-

sensing branch of the mTORC1 pathway. Mutations in this gene are associated with autosomal dominant familial focal epilepsy with variable foci. A single nucleotide polymorphism in an intron of this gene has been associated with an increased risk of hepatocellular carcinoma in individuals with chronic hepatitis C virus infection. Alternative

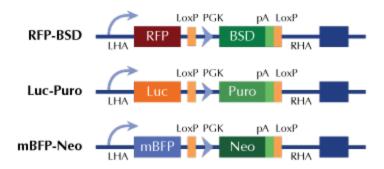
splicing results in multiple transcript variants. [provided by RefSeq, Mar 2014]





# **Product images:**

### Donor Vector Edited Chromosome



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