

Product datasheet for **KN211462**

DEPDC5 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	DEPDC5
Locus ID:	9681
Components:	<p>KN211462G1, DEPDC5 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGCAGTGGTCAGTATCGAT</p> <p>KN211462G2, DEPDC5 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AAACCTCGTCATCCACAAGAA</p> <p>KN211462D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCCGGC
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 AGGCATCGTG GTGTCACGCT CGTCGTTTGG TATGGCTTCA TTCAGCTCCG GTTCCCAACG ATC

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:

[O75140](#)

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:

