

Product datasheet for KN304504LP

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Depdc5 Mouse 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: Depdc5 Locus ID: 277854

Components: KN304504G1, Depdc5 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN304504G2, Depdc5 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN304504LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

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: <u>NM 001025426, NM 001170567, NM 177786, NM 001360014</u>

 UniProt ID:
 P61460

 Synonyms:
 AV016528

Summary: As a component of the GATOR1 complex functions as an inhibitor of the amino acid-sensing

branch of the TORC1 pathway. The GATOR1 complex strongly increases GTP hydrolysis by RRAGA and RRAGB within RRAGC-containing heterodimers, thereby deactivating RRAGs, releasing mTORC1 from lysosomal surface and inhibiting mTORC1 signaling. The GATOR1 complex is negatively regulated by GATOR2 the other GATOR subcomplex in this amino acid-

sensing branch of the TORC1 pathway.[UniProtKB/Swiss-Prot Function]



Product images:

Donor Vector Edited Chromosome



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