

Product datasheet for **KN205317**

PI 3 Kinase Class 3 (PIK3C3) 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:	PI 3 Kinase Class 3
Locus ID:	5289
Components:	<p>KN205317G1, PI 3 Kinase Class 3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGTAAGAGAACAACACTCGGGAC</p> <p>KN205317G2, PI 3 Kinase Class 3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CTACATCTATAGTTGTGACC</p> <p>KN205317D, 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
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 TACAGGCATC GTGGTGTAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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_001308020](#), [NM_002647](#)

UniProt ID:

[Q8NEB9](#)

Synonyms:

hVps34; VPS34; Vps34

Summary:

Catalytic subunit of the PI3K complex that mediates formation of phosphatidylinositol 3-phosphate; different complex forms are believed to play a role in multiple membrane trafficking pathways: PI3KC3-C1 is involved in initiation of autophagosomes and PI3KC3-C2 in maturation of autophagosomes and endocytosis. Involved in regulation of degradative endocytic trafficking and required for the abscission step in cytokinesis, probably in the context of PI3KC3-C2 (PubMed:20643123, PubMed:20208530). Involved in the transport of lysosomal enzyme precursors to lysosomes. Required for transport from early to late endosomes (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:

