

## Product datasheet for **KN210544**

### PI 3 Kinase p85 alpha (PIK3R1) 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 p85 alpha
Locus ID:	5295
Components:	<b>KN210544G1</b> , PI 3 Kinase p85 alpha gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AATCATACAGCGCTCTGTAC <b>KN210544G2</b> , PI 3 Kinase p85 alpha gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GAAGATATTGACTTGCACTT <b>KN210544D</b> , donor DNA containing left and right homologous arms and GFP-puro functional cassette.

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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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 ACAGGCATCG TGGTGTACG CTCGTCGTTT GGTATGGCTT CATTACGCTC CGTTCCCAA CGATC

**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\\_001242466](#), [NM\\_181504](#), [NM\\_181523](#), [NM\\_181524](#)

**UniProt ID:**

[P27986](#)

**Synonyms:**

AGM7; GRB1; IMD36; p85; p85-ALPHA

**Summary:**

Phosphatidylinositol 3-kinase phosphorylates the inositol ring of phosphatidylinositol at the 3-prime position. The enzyme comprises a 110 kD catalytic subunit and a regulatory subunit of either 85, 55, or 50 kD. This gene encodes the 85 kD regulatory subunit. Phosphatidylinositol 3-kinase plays an important role in the metabolic actions of insulin, and a mutation in this gene has been associated with insulin resistance. Alternative splicing of this gene results in four transcript variants encoding different isoforms. [provided by RefSeq, Jun 2011]

Product images:

