

## **Product datasheet for KN213112LP**

#### OriGene Technologies, Inc.

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## PI 3 Kinase catalytic subunit alpha (PIK3CA) Human 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: PI 3 Kinase catalytic subunit alpha

**Locus ID:** 5290

**Components:** KN213112G1, PI 3 Kinase catalytic subunit alpha gRNA vector 1 in pCas-Guide CRISPR vector

(GE100002)

KN213112G2, PI 3 Kinase catalytic subunit alpha gRNA vector 2 in pCas-Guide CRISPR vector

(GE100002)

KN213112LPD, 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.

RefSeg: NM 006218

UniProt ID: P42336

Synonyms: CLOVE; CWS5; MCAP; MCM; MCMTC; p110-alpha; Pl3K; Pl3K-alpha

**Summary:** Phosphatidylinositol 3-kinase is composed of an 85 kDa regulatory subunit and a 110 kDa

catalytic subunit. The protein encoded by this gene represents the catalytic subunit, which uses ATP to phosphorylate PtdIns, PtdIns4P and PtdIns(4,5)P2. This gene has been found to be oncogenic and has been implicated in cervical cancers. A pseudogene of this gene has

been defined on chromosome 22. [provided by RefSeq, Apr 2016]





# **Product images:**

### Donor Vector Edited Chromosome



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