

## Product datasheet for KN216391RB

#### OriGene Technologies, Inc.

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### Phospholipase C gamma 1 (PLCG1) Human Gene Knockout Kit (CRISPR)

**Product data:** 

**Product Type:** Knockout Kits (CRISPR)

**Format:** 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

**Donor DNA:** RFP-BSD

Symbol: Phospholipase C gamma 1

**Locus ID:** 5335

**Components: KN216391G1**, Phospholipase C gamma 1 gRNA vector 1 in pCas-Guide CRISPR vector

(GE100002)

KN216391G2, Phospholipase C gamma 1 gRNA vector 2 in pCas-Guide CRISPR vector

(GE100002)

KN216391RBD, donor DNA containing left and right homologous arms and RFP-BSD

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 002660, NM 182811

UniProt ID: P19174

Synonyms: NCKAP3; PLC-II; PLC1; PLC148; PLCgamma1

**Summary:** The protein encoded by this gene catalyzes the formation of inositol 1,4,5-trisphosphate and

diacylglycerol from phosphatidylinositol 4,5-bisphosphate. This reaction uses calcium as a cofactor and plays an important role in the intracellular transduction of receptor-mediated tyrosine kinase activators. For example, when activated by SRC, the encoded protein causes the Ras guanine nucleotide exchange factor RasGRP1 to translocate to the Golgi, where it activates Ras. Also, this protein has been shown to be a major substrate for heparin-binding growth factor 1 (acidic fibroblast growth factor)-activated tyrosine kinase. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul

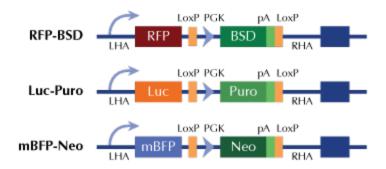
2008]





# **Product images:**

#### Donor Vector Edited Chromosome



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