

## Product datasheet for KN208947LP

#### OriGene Technologies, Inc.

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## beta Catenin (CTNNB1) 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: beta Catenin

**Locus ID:** 1499

**Components: KN208947G1**, beta Catenin gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN208947G2**, beta Catenin gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN208947LPD, 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 001098209</u>, <u>NM 001098210</u>, <u>NM 001904</u>, <u>NM 001330729</u>

UniProt ID: P35222

**Synonyms:** armadillo; CTNNB; MRD19

**Summary:** The protein encoded by this gene is part of a complex of proteins that constitute adherens

junctions (AJs). AJs are necessary for the creation and maintenance of epithelial cell layers by regulating cell growth and adhesion between cells. The encoded protein also anchors the actin cytoskeleton and may be responsible for transmitting the contact inhibition signal that causes cells to stop dividing once the epithelial sheet is complete. Finally, this protein binds to the product of the APC gene, which is mutated in adenomatous polyposis of the colon.

Mutations in this gene are a cause of colorectal cancer (CRC), pilomatrixoma (PTR),

medulloblastoma (MDB), and ovarian cancer. Alternative splicing results in multiple transcript

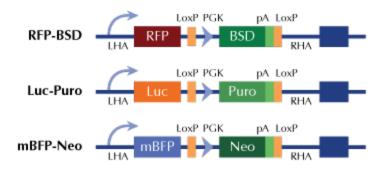
variants. [provided by RefSeq, Aug 2016]





# **Product images:**

### Donor Vector Edited Chromosome



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