

## Product datasheet for KN211365LP

#### OriGene Technologies, Inc.

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## **NOTCH1 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: NOTCH1 Locus ID: 4851

**Components: KN211365G1**, NOTCH1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN211365G2, NOTCH1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN211365LPD, 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 017617</u>

UniProt ID: <u>P46531</u>

**Synonyms:** AOS5; AOVD1; hN1; TAN1

Summary: This gene encodes a member of the NOTCH family of proteins. Members of this Type I

transmembrane protein family share structural characteristics including an extracellular domain consisting of multiple epidermal growth factor-like (EGF) repeats, and an intracellular domain consisting of multiple different domain types. Notch signaling is an evolutionarily conserved intercellular signaling pathway that regulates interactions between physically adjacent cells through binding of Notch family receptors to their cognate ligands. The encoded preproprotein is proteolytically processed in the trans-Golgi network to generate two polypeptide chains that heterodimerize to form the mature cell-surface receptor. This receptor plays a role in the development of numerous cell and tissue types. Mutations in this

gene are associated with aortic valve disease, Adams-Oliver syndrome, T-cell acute

lymphoblastic leukemia, chronic lymphocytic leukemia, and head and neck squamous cell

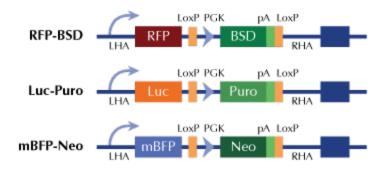
carcinoma. [provided by RefSeq, Jan 2016]





# **Product images:**

### Donor Vector Edited Chromosome



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