

# Product datasheet for KN311124BN

# Notch1 Mouse Gene Knockout Kit (CRISPR)

## **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control
Donor DNA:	mBFP-Neo
Symbol:	Notch1
Locus ID:	18128
Components:	<ul> <li>KN311124G1, Notch1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)</li> <li>KN311124G2, Notch1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)</li> <li>KN311124BND, donor DNA containing left and right homologous arms and mBFP-Neo functional cassette.</li> <li>GE100003, scramble sequence in pCas-Guide vector</li> </ul>
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 008714</u>
UniProt ID:	<u>Q01705</u>
Synonyms:	9930111A19Rik; lin-12; Mis6; N1; Tan1

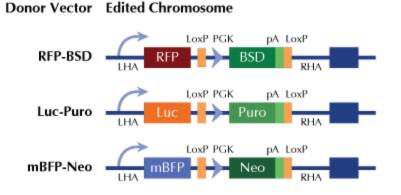


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#### Notch1 Mouse Gene Knockout Kit (CRISPR) – KN311124BN

Functions as a receptor for membrane-bound ligands Jagged-1 (JAG1), Jagged-2 (JAG2) and Summary: Delta-1 (DLL1) to regulate cell-fate determination. Upon ligand activation through the released notch intracellular domain (NICD) it forms a transcriptional activator complex with RBPJ/RBPSUH and activates genes of the enhancer of split locus. Affects the implementation of differentiation, proliferation and apoptotic programs. Involved in angiogenesis; negatively regulates endothelial cell proliferation and migration and angiogenic sprouting. Involved in the maturation of both CD4(+) and CD8(+) cells in the thymus. Important for follicular differentiation and possibly cell fate selection within the follicle. During cerebellar development, functions as a receptor for neuronal DNER and is involved in the differentiation of Bergmann glia. Represses neuronal and myogenic differentiation. May play an essential role in postimplantation development, probably in some aspect of cell specification and/or differentiation. May be involved in mesoderm development, somite formation and neurogenesis. May enhance HIF1A function by sequestering HIF1AN away from HIF1A. Required for the THBS4 function in regulating protective astrogenesis from the subventricular zone (SVZ) niche after injury. Involved in determination of left/right symmetry by modulating the balance between motile and immotile (sensory) cilia at the left-right organiser (LRO). [UniProtKB/Swiss-Prot Function]

### **Product images:**



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

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