

# **Product datasheet for KN221611BN**

## OriGene Technologies, Inc.

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## CD133 (PROM1) Human Gene Knockout Kit (CRISPR)

#### **Product data:**

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

**Format:** 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

**Donor DNA:** mBFP-Neo

Symbol: CD133

Locus ID: 8842

**Components: KN221611G1**, CD133 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN221611G2**, CD133 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN221611BND, donor DNA containing left and right homologous arms and mBFP-Neo

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: NM 001145847, NM 001145848, NM 001145849, NM 001145850, NM 001145851,

NM 001145852, NM 006017

UniProt ID: <u>043490</u>

Synonyms: AC133; CD133; CORD12; MCDR2; MSTP061; PROML1; RP41; STGD4

**Summary:** This gene encodes a pentaspan transmembrane glycoprotein. The protein localizes to

membrane protrusions and is often expressed on adult stem cells, where it is thought to function in maintaining stem cell properties by suppressing differentiation. Mutations in this gene have been shown to result in retinitis pigmentosa and Stargardt disease. Expression of this gene is also associated with several types of cancer. This gene is expressed from at least five alternative properties that are expressed in a tirgue dependent mapper. Multiple

five alternative promoters that are expressed in a tissue-dependent manner. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by

RefSeq, Mar 2009]





# **Product images:**

### Donor Vector Edited Chromosome



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