

Product datasheet for **KN221611**

CD133 (PROM1) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	CD133
Locus ID:	8842
Components:	<p>KN221611G1, CD133 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGAAGGCTGCCCTCCTGAAA</p> <p>KN221611G2, CD133 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TTAGGAGCATCTGTGGATGA</p> <p>KN221611D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCCGGC
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 TACAGGCATC GTGGTGTAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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:

[O43490](#)

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 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:

