

Product datasheet for **KN308971**

Kremen1 Mouse 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: Kremen1
Locus ID: 84035
Components: **KN308971G1**, Kremen1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGGGGTCCACGCGCGAGAGA
KN308971G2, Kremen1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGGCGGAGAGCAGCGCGAGA
KN308971D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.

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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 ACTGCGGCCA ACTTACTTCT GACAACGATC GGAGGACCGA AGGAGCTAAC CGCTTTTTTG CACAACATGG
 GGGATCATGT AACTCGCCTT

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_032396](#)

UniProt ID:

[Q99N43](#)

Synonyms:

AV002070; Kremen; Krm1

Summary:

Receptor for Dickkopf proteins. Cooperates with DKK1/2 to inhibit Wnt/beta-catenin signaling by promoting the endocytosis of Wnt receptors LRP5 and LRP6 (PubMed:12050670). In the absence of DKK1, potentiates Wnt-beta-catenin signaling by maintaining LRP5 or LRP6 at the cell membrane (By similarity). Can trigger apoptosis in a Wnt-independent manner and this apoptotic activity is inhibited upon binding of the ligand DKK1 (PubMed:26206087). Plays a role in limb development; attenuates Wnt signaling in the developing limb to allow normal limb patterning and can also negatively regulate bone formation (PubMed:18505822). Modulates cell fate decisions in the developing cochlea with an inhibitory role in hair cell fate specification (PubMed:27550540).[UniProtKB/Swiss-Prot Function]

Product images:

