

## Product datasheet for **KN219275**

### Delta Opioid Receptor (OPRD1) 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:	Delta Opioid Receptor
Locus ID:	4985
Components:	<p><b>KN219275G1</b>, Delta Opioid Receptor gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCACACGGCCGAGTAGAGCG</p> <p><b>KN219275G2</b>, Delta Opioid Receptor gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GATGGCGATTGCCAGGGCGA</p> <p><b>KN219275D</b>, 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
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 TTCAGCTCCG GTTCCCAACG ATC

**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\\_000911](#)

**UniProt ID:**

[P41143](#)

**Synonyms:**

OPRD

**Summary:**

G-protein coupled receptor that functions as receptor for endogenous enkephalins and for a subset of other opioids. Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors, such as adenylate cyclase. Signaling leads to the inhibition of adenylate cyclase activity. Inhibits neurotransmitter release by reducing calcium ion currents and increasing potassium ion conductance. Plays a role in the perception of pain and in opiate-mediated analgesia. Plays a role in developing analgesic tolerance to morphine.  
 [UniProtKB/Swiss-Prot Function]

Product images:

