

## Product datasheet for **KN218456**

### Leptin Receptor (LEPR) 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:	Leptin Receptor
Locus ID:	3953
Components:	<b>KN218456G1</b> , Leptin Receptor gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGTGTGGTTTTGTTACATTG <b>KN218456G2</b> , Leptin Receptor gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAAAATCTCTACCATGTTTA <b>KN218456D</b> , 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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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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CTAAGCTTCC CTATAGGTCT TCCTTGTGGT ACATACTTCT CTCACTCTCG CCGGTTGGAC TTTAGATCAG
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TACAGGCATC GTGGTGTAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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**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\\_001003679](#), [NM\\_001003680](#), [NM\\_001198687](#), [NM\\_001198688](#), [NM\\_001198689](#), [NM\\_002303](#)

**UniProt ID:**

[P48357](#)

**Synonyms:**

CD295; LEP-R; LEPRD; OB-R; OBR

**Summary:**

The protein encoded by this gene belongs to the gp130 family of cytokine receptors that are known to stimulate gene transcription via activation of cytosolic STAT proteins. This protein is a receptor for leptin (an adipocyte-specific hormone that regulates body weight), and is involved in the regulation of fat metabolism, as well as in a novel hematopoietic pathway that is required for normal lymphopoiesis. Mutations in this gene have been associated with obesity and pituitary dysfunction. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. It is noteworthy that this gene and LEPROT gene (GeneID:54741) share the same promoter and the first 2 exons, however, encode distinct proteins (PMID:9207021).[provided by RefSeq, Nov 2010]

Product images:

