

Product datasheet for **KN210211**

12 Lipoxygenase (ALOX12) 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: 12 Lipoxygenase
Locus ID: 239
Components: **KN210211G1**, 12 Lipoxygenase gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CTGCACGCGGTTGTACGACC
KN210211G2, 12 Lipoxygenase gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TTTGGCTGGTCGGGACGCGC
KN210211D, 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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CAGCTCCGGT TCCCAACGAT C

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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_000697](#)

UniProt ID:

[P18054](#)

Synonyms:

12-LOX; 12S-LOX; LOG12

Summary:

This gene encodes a member of the lipoxygenase family of proteins. The encoded enzyme acts on different polyunsaturated fatty acid substrates to generate bioactive lipid mediators including eicosanoids and lipoxins. The encoded enzyme and its reaction products have been shown to regulate platelet function. Elevated expression of this gene has been observed in pancreatic islets derived from human diabetes patients. Allelic variants in this gene may be associated with susceptibility to toxoplasmosis. Multiple pseudogenes of this gene have been identified in the human genome. [provided by RefSeq, Aug 2017]

Product images:

