

Product datasheet for **KN217447**

HFE 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:	HFE
Locus ID:	3077
Components:	<p>KN217447G1, HFE gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGCTTGCTGCGTGAGTCCGA</p> <p>KN217447G2, HFE gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCGCGGTCTGCAAAGCATC</p> <p>KN217447D, 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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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_000410](#), [NM_001300749](#), [NM_139002](#), [NM_139003](#), [NM_139004](#), [NM_139005](#), [NM_139006](#), [NM_139007](#), [NM_139008](#), [NM_139009](#), [NM_139010](#), [NM_139011](#)

UniProt ID:

[Q30201](#)

Synonyms:

HFE1; HH; HLA-H; MVCD7; TFQTL2

Summary:

The protein encoded by this gene is a membrane protein that is similar to MHC class I-type proteins and associates with beta2-microglobulin (beta2M). It is thought that this protein functions to regulate iron absorption by regulating the interaction of the transferrin receptor with transferrin. The iron storage disorder, hereditary haemochromatosis, is a recessive genetic disorder that results from defects in this gene. At least nine alternatively spliced variants have been described for this gene. Additional variants have been found but their full-length nature has not been determined. [provided by RefSeq, Jul 2008]

Product images:

