

## Product datasheet for **KN204453**

### HNF1 beta (HNF1B) 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:       | HNF1 beta                                                                                                                                                                                                                                                                                                                                                                      |
| Locus ID:     | 6928                                                                                                                                                                                                                                                                                                                                                                           |
| Components:   | <p><b>KN204453G1</b>, HNF1 beta gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GAGCGCCCTGCTGAGCTCCG</p> <p><b>KN204453G2</b>, HNF1 beta gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAGCACCTCCTTGGTGACCC</p> <p><b>KN204453D</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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AGGGTCTCTA CTCTTCGCTT CCTCTGCGT CCCCTTCTTC CACGAGCACC CCAGCTTCTT CTGGCTCTCA
CCTGAACCCC GAAGCGTAGT GTCTTCTCTC TGGACTAAAG CGGAAGTCTG AACCGGTGGA AAAGCCCCCG
GCCTAGGCTG CAAGGCACTG GCTTAACAAG TCCAAAGGTT AGGTGAAGTT TGGCTGATAA GCAGAACCAG
TAAAGAAGG TCTCTAGCCC CCCAGCGTGA GTACAATGGA CCCTGGCAA GCCCCGCTCC CGGCCAGGT
CTTCTGCTCT CCAGGTCTGC CCTCCGGCT CTCCCTCTCT CCGGGTTTCC CCCTCCCCAC CATCATTTCG
ATCCAGCCGA AAGCTGGGCC CTCCCACTA ATTTGCATAT CTTATATGGC CTAATGGTGG CGATCATGGC
AAGTTAGAAG TTTTCTGACT CCTTTCGAG GAGCCTCCGG GACCCCGGG AGTAACAGGT GTCTGGAGGC
TGAAGGTGG AGGGTTTCTT GGATTTGGGG TTTGCTTGTG AAACCTCCCT CCACCCTCTT CTCTCGCACC
CACCCACCCC CTCACCCCTT TCTTTTCCG TCCTTGAAA GAGTTGCTGC CATCCCCGAA CTTCCGGGGT
AAGCTGGAGA CGCTGCCCTT GTCCCTGGC AGCGGGGCG AGCCCGACAC CAAGCCGGTC TTCCATACTC
TCACCAACGG CCACGCCAAG GGCCGCTTGT CCGGCGACGA GGGCTCCGAG GACGGCGAC ACTATGACAC
ACCTCCCATC CTCAAGGAGC TGCAGGCGCT CAACACCGAG GAGGCGGCG AGCAGCGGGC GGAGGTGGAC
CGGATGCTCA GGTAGGCGCA GAGCGAGGTG GAGGGGACCC ACCCGAACCC CTGGAGCCCC GGCCCCGGGC
CTGAGTGACA CTGCGCCCGA CCACACTCGC CAAGCCCGTT TCCCACCAGA GAAGTCCCCC GGGGGGCGCT
CTGCTTCTCT CCAACACCC GGACCCTTCC CAATCCCTTA GCGGGACGAC CCTGCGGCC ACCGGGCTTC
TTCTCCCCAG GCCCAGGCCA GCGTCCGAGA CCAAGGGCT TTTCCCGCG GGGTGGGGG TGGGCCGGG
AGAAGTGGAG CTGTGGAGCC CTTTGCCGG AGGTTTGCC ACGCGACTGA AGGTGCGAGT GGGTGCAGT
AAACCGCTGC

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**GE100003**, scramble sequence in pCas-Guide vector



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**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\\_000458](#), [NM\\_001165923](#), [NM\\_001304286](#), [NM\\_006481](#)

**UniProt ID:** [P35680](#)

**Synonyms:** FJHN; HNF-1-beta; HNF-1B; HNF1beta; HNF2; HPC11; LF-B3; LFB3; MODY5; TCF-2; TCF2; VHNF1

**Summary:** This gene encodes a member of the homeodomain-containing superfamily of transcription factors. The protein binds to DNA as either a homodimer, or a heterodimer with the related protein hepatocyte nuclear factor 1-alpha. The gene has been shown to function in nephron development, and regulates development of the embryonic pancreas. Mutations in this gene result in renal cysts and diabetes syndrome and noninsulin-dependent diabetes mellitus, and expression of this gene is altered in some types of cancer. Multiple transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Sep 2009]

### Product images:

