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Product datasheet for KN218565RB

Interferon beta (IFNB1) Human Gene Knockout Kit (CRISPR)

Product data:

| Product Type: | Knockout Kits (CRISPR) |
|---------------|--|
| Format: | 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control |
| Donor DNA: | RFP-BSD |
| Symbol: | Interferon beta |
| Locus ID: | 3456 |
| Components: | KN218565G1, Interferon beta gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AATTTGGAGGAGACACTTGT KN218565G2, Interferon beta gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TCCAAGCAAGTTGTAGCTCA KN218565RBD, donor DNA containing left and right homologous arms and RFP-BSD functional cassette. Homologous arm and RFP-BSD sequences: pUC vector backbone in gray; Left arm sequence in blue; RFP-BSD in green; Right arm in violet AATCTGCACA TGTATTTTGT TATATTTTAA ATCATCCTA GATTACTTAT AATACCTGAT ACAATATAAA TGCTAAATAG CTGTAACACT GTATCTTTAA AATTACATT ATTTTTGTT GTTGTATAT TATTTTATT GTATTTTTAA AAATATTTT CAATCTCAACAG TCAGTAGAAT CCACGGATAC AGAACCTATG GATAGGAAGG ACCAACTGTA TCTTTTAGTG TTTTGAGGTT CTTGAATTCT CAGGTCGTTT GCTTTCCTTT GCTTTCCCC AAGTCTTGTT TTACAATTTG CTTTAGTGAT TCACTGAAAC ATTAGAAAAC CTCACAGTTT GTAATATCTT TTCCCTATTA ATATATCAT AAGATAGGAG CTTAAATAAA AGTTTAGA AACTACTAAA ATGTAAAAAC CTAGAGAAAA CTGAAAGGGA GAAGGGAAAT CCACGGAATC CTCTGAATAC CTCGGAAAC CTCACAGTTT GTAATAGA CATAGGAAAA CTGAAAGGA GAAGGGAAAT CTAAATAAA GAGTTTAGA AACTACTAAA AAGGACATT CTACATGAAA CTGTAAAGGGA GAACGGACC ATTCTAATAA AAGGCCAT ACCATGGGA GAAGGGAAACT CTACGAAGGAC CTTTGCAATA ATAGGCCA ACCTGTGCAA CACGTGTGC TGACAACAG GTAGTAGGGA GACCGCCCAT TGACCATCTA TGACAGAGC CCTGTGGCAA TTGAATGGA GACTGAAGGGA GACCGCCCCAT TGACCACTAT TGAGAAGCC CCTGAGGAGA ATTAAGCAGC TGCAGAAGAT CCAGAAGGAG GACCCCCCAT TGACCATCTA TGAGATGCT CCAGAACACTCT TTGCAATTTT CAGACAAAGA GTGATAGCA CAGTCTGGAA TGAGACATTT GTTGAGAACC TCCGGAAAACTCA TGACAAAGC ATCGAAAGAA AGATATTATG GAGAGATTCT GCATTACCTG AAGGCCAAGG AGTACAGTCA TGACAAAGC ACCTGGAAA AGATATTATG GAGAGATTCT GCATTACCTG AAGGCCAAGG AGAACTCA TGACAAAGC ACCTGAAAA AGATATTATG GAGAGATTCT GCATTACCTG AAGGCCAAGG AGTACAGTCA CTGCGAAACT GACACGTGCA GACTGCTGGAAT CCTAAGGAAC TTTACCTG AAGGCAAGG AGTACAGTCA TGACAAGGA GCCCCGCAAGGAAATTCCTAAGGAAC TTTACCTG AAGGCCAAGG AGAACCTCA TGACAAGGA GACCTGCAA AGATATTAT |
| | GE100003, scramble sequence in pCas-Guide vector |

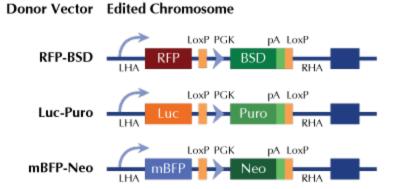


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| | Interferon beta (IFNB1) Human Gene Knockout Kit (CRISPR) – KN218565RB |
|-------------|--|
| Disclaimer: | These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR 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: | <u>NM 002176</u> |
| UniProt ID: | <u>P01574</u> |
| Synonyms: | IFB; IFF; IFNB |
| Summary: | This gene encodes a cytokine that belongs to the interferon family of signaling proteins, which are released as part of the innate immune response to pathogens. The protein encoded by this gene belongs to the type I class of interferons, which are important for defense against viral infections. In addition, type I interferons are involved in cell differentiation and anti-tumor defenses. Following secretion in response to a pathogen, type I interferons bind a homologous receptor complex and induce transcription of genes such as those encoding inflammatory cytokines and chemokines. Overactivation of type I interferon secretion is linked to autoimmune diseases. Mice deficient for this gene display several phenotypes including defects in B cell maturation and increased susceptibility to viral infection. [provided by RefSeq, Sep 2015] |

Product images:



RFP, Luc, and mBFP will be under native gene promoter

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