

## Product datasheet for KN218565

## OriGene Technologies, Inc.

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## Interferon beta (IFNB1) 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: 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

**KN218565D**, donor DNA containing left and right homologous arms and GFP-puro functional

cassette.

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:** <u>NM 002176</u>

UniProt ID: P01574

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:**

