

## **Product datasheet for TL312232**

## OriGene Technologies, Inc.

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## Interferon beta (IFNB1) Human shRNA Plasmid Kit (Locus ID 3456)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: Interferon beta (IFNB1) Human shRNA Plasmid Kit (Locus ID 3456)

**Locus ID:** 3456

Synonyms: IFB; IFF; IFN-beta; IFNB

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** IFNB1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 3456).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

**RefSeq:** <u>NM 002176, NM 002176.1, NM 002176.2, NM 002176.3, BC069314, BC096150, BC096151,</u>

BC096152, BC096153, NM 002176.4

UniProt ID: P01574

**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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).