

Product datasheet for TL312236

OriGene Technologies, Inc.

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Interferon alpha 2 (IFNA2) Human shRNA Plasmid Kit (Locus ID 3440)

Product data:

Product Type: shRNA Plasmids

Product Name: Interferon alpha 2 (IFNA2) Human shRNA Plasmid Kit (Locus ID 3440)

Locus ID: 3440

Synonyms: IFN-alpha-2; IFN-alphaA; IFNA; IFNA2B; leIF A

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Puromycin

Selection: Format:

Lentiviral plasmids

Components: IFNA2 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 3440).

5µg purified plasmid DNA per construct

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

RefSeq: NM 000605, NM 000605.1, NM 000605.2, NM 000605.3, BC074936, BC074937, BC104163,

BC104164, NM 000605.4

UniProt ID: P01563

Summary: This gene is a member of the alpha interferon gene cluster on chromosome 9. The encoded

cytokine is a member of the type I interferon family that is produced in response to viral infection as a key part of the innate immune response with potent antiviral, antiproliferative and immunomodulatory properties. This cytokine, like other type I interferons, binds a plasma membrane receptor made of IFNAR1 and IFNAR2 that is ubiquitously expressed, and thus is able to act on virtually all body cells. The encoded protein is effective in reducing the symptoms and duration of the common cold and in treating many types of cancer, including some hematological malignancies and solid tumors. A deficiency of type I interferon in the blood is thought to be a hallmark of severe COVID-19 and may provide a rationale for a

combined therapeutic approach. [provided by RefSeq, Aug 2020]

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).