

Product datasheet for RC221091L4

OriGene Technologies, Inc.

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Interferon alpha 2 (IFNA2) (NM_000605) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Interferon alpha 2 (IFNA2) (NM_000605) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Interferon alpha 2

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

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

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

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC221091).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_000605

ORF Size: 564 bp

Interferon alpha 2 (IFNA2) (NM_000605) Human Tagged Lenti ORF Clone - RC221091L4

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 000605.2</u>

 RefSeq Size:
 1142 bp

 RefSeq ORF:
 567 bp

 Locus ID:
 3440

 UniProt ID:
 P01563

Cytogenetics:

Protein Families: Druggable Genome, Secreted Protein

9p21.3

Protein Pathways: Antigen processing and presentation, Autoimmune thyroid disease, Cytokine-cytokine

receptor interaction, Cytosolic DNA-sensing pathway, Jak-STAT signaling pathway, Natural killer cell mediated cytotoxicity, Regulation of autophagy, RIG-I-like receptor signaling

pathway, Toll-like receptor signaling pathway

MW: 21.4 kDa

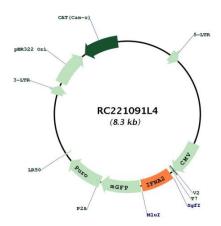
Gene Summary: This gene is a member of the alpha interferon gene cluster on chromosome 9. The encoded

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

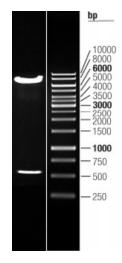
combined therapeutic approach. [provided by RefSeq, Aug 2020]



Product images:



Circular map for RC221091L4



Double digestion of RC221091L4 using Sgfl and Mlul $\,$