

Product datasheet for **RG235416**

IFNL4 (NM_001276254) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: IFNL4 (NM_001276254) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: IFNL4
Synonyms: IFNAN
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG235416 representing NM_001276254.
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCGGCCGAGTGTCTGGGCCGAGTGGCCGCGGGGCTGTGGGTCTGTGCACGGTATCGCAGCGGCC
CCCCGGCGCTGCCTGCTCTCGCACTACCGCTCGCTGGAGCCCCGGACGCTGGCGGCTGCCAAGGCCTG
AGGGACCCTACGAGGAAGAGGGCTGAGCTGGGGCAGCGCAACTGCTCCTCCGCCCCAGGAGGGAT
CCTCCGCGCCATCGTCTCGCTCGGCTCCGCCACGTGGCCCGGGGCATCGCGGACGCCAGGCAGTG
CTCAGCGGCTGCACCGCTCGGAGCTGCTCCCCGGCGCCGCCGATCCTGGAGCTGCTGGCGGCCGCG
GGGAGGGATGTGGCGCCTGCCTTGAGCTGGCACGGCCAGGCTCCTCCAGGAAGTCCCCGGGGCCAG
AAGAGGGCTCACAAACCCGGAGAGCGGACTCGCCTCGGTGCCGCAAAGCCAGCGTGGTCTTCAACCTC
CTGCGCCTGCTCACGTGGGAGCTCCGGTGGCTGCACACTCTGGGCTTGCCCT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG235416
Blue=ORF Red=Cloning site Green=Tag(s)

```
MRPSVAAVAAGLWVLCVIAAAPRRCLLSHYRSLEPRLAAAKALRDREYEEALSWGQRNCSFRPRRD
PPRPSSCARLRHVARGIADAQAVLSGLHRSELLPGAGPILELLAAAGRDVAACLELARGPSSRKVPGAQ
KRRHKPRRADSPRCRKASVVFNLLRLLTWELRLAAHSGPCL
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPYSGYENPFLHAINNGGYNTRIEKYEDGGVLVHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites: Sgfl-MluI



OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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).

RefSeq: [NM_001276254.2](#), [NP_001263183.2](#)

RefSeq Size: 1636 bp

RefSeq ORF: 540 bp

Locus ID: 101180976

UniProt ID: [K9M1U5](#)

Cytogenetics: 19q13.2

MW: 20.1 kDa

Gene Summary: This gene is a polymorphic pseudogene which, in some humans, encodes the interferon (IFN) lambda 4 protein. Humans are polymorphic for the dinucleotide TT/deltaG allele. Compared to the ancestral state in non-human primates, the TT allele produces a frameshift in the coding region of this gene which is predicted to induce nonsense-mediated mRNA decay. This allele, and an allele in the first intron of this gene, have experienced a rapid increase in frequency and show indications of positive selection. The ancestral states of these alleles are associated with an impaired ability to clear hepatitis C virus. This gene, like other type III interferons (IFNs), interacts with the IFN lambda receptor complex (IFNLR) whose signaling is generally restricted to epithelial cells. This gene resides in a cluster of four type III IFN genes and at least two pseudogenes on chromosome 19q13.2. In general, interferons are produced in response to viral infection and block viral replication and propagation to uninfected cells by activating the JAK-STAT pathway and up-regulating antiviral genes. Multiple alternatively spliced transcripts have been described for this gene but their biological validity and protein coding status is still being ascertained. [provided by RefSeq, May 2017]