

Product datasheet for **RG205582**

IFIT2 (NM_001547) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | IFIT2 (NM_001547) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | IFIT2 |
| Synonyms: | cig42; G10P2; GARG-39; IFI-54; IFI-54K; IFI54; IFIT-2; ISG-54 K; ISG-54K; ISG54; P54 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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ORF Nucleotide Sequence:

>RG205582 representing NM_001547
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAGTGAGAACAATAAGAATTCCTTGGAGAGCAGCCTACGGCAACTAAAATGCCATTTACCTGGA
 TGATGGAGGGAGAAAACCTCTGGATGATTTTGAAGACAAAGTATTTACCGACTGAGTTTCAGAATCG
 TGAATTCAAAGCCACAATGTGCAACCTACTGGCCTATCTAAAGCACCTCAAAGGGCAAAACGAGGCAGCC
 CTGGAATGCTTACGTAAGCTGAAGAGTTAATCCAGCAAGAGCATGCTGACCAGGCAGAAATCAGAAGTC
 TGGTCACCTGGGAAACTATGCCTGGTCTACTATCACATGGGCCGACTCTCAGACGTTAGATTATGT
 AGACAAGGTGAGACATGTCTGTGAGAAGTTTCCAGTCCCTATAGAATTGAGAGTCCAGAGCTTGACTGT
 GAGGAAGGTGGACACGGTTAAGTGTGGAGGAAACAAAATGAAAGAGCGAAGGTGTGCTTTGAGAAGG
 CTCTGGAAAAGAAGCCAAAGAACCAGAATTCACCTCTGGACTGGCAATAGCAAGCTACCGTCTGGACAA
 CTGGCCACCATCTCAGAACGCCATTGACCTCTGAGGCAAGCCATTCGGCTGAATCCTGACAACCAGTAC
 CTTAAAGTCCCTGGCTCTGAAGCTTCATAAGATGCGTGAAGAAGGTGAAGAGGAAGGTGAAGGAGAGA
 AGTTAGTTGAAGAAGCCTTGGAGAAAGCCAGGTGTAACAGATGTACTTCGAGTGCAGCCAAGTTTTA
 TCGAAGAAAAGATGAGCCAGACAAAGCGATTGAACTGCTTAAAAAGGCTTTAGAATACATACCAACAAT
 GCCTACCTGCATTGCCAAATTGGGTGCTGCTATAGGGCAAAAGTCTTCCAAGTAATGAATCTAAGAGAGA
 ATGGAATGTATGGGAAAAGAAAGTTACTGGAACAAATAGGACACGCTGTGGCTCATCTGAAGAAAGCTGA
 TGAGGCCAATGATAATCTTCCGTGTCTGTTCCATTCTGCCAGCCTCCATGCTCTAGCAGATCAGTAT
 GAAGAAGCAGAGTATTACTTCCAAAAGGAATTCAGTAAAGAGCTTACTCCTGTAGCGAAAACAACTGCC
 ATCTGCGGTATGGCAACTTTCAGCTGTACCAAAATGAAGTGTGAAGACAAGGCCATCCACCCTTTATAGA
 GGGTGTAAAAATAAACCCAGAAATCAAGGGAGAAAAGAAAAGATGAAAGACAAACTGCAAAAAATTGCCAAA
 ATGCGACTTTCTAAAAATGGAGCAGATTCTGAGGCTTTGCATGTCTTGGCATTCTTTCAGGAGCTGAATG
 AAAAAATGCAACAAGCAGATGAAGACTCTGAGAGGGGTTTGGAGTCTGGAAGCCTCATCCCTTCAGCATC
 AAGCTGGAATGGGAATGGAGAATAGAGATGTGGTGCCCACTAGGCTACTGC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG205582 representing NM_001547
 Red=Cloning site Green=Tags(s)

MSENNKNSLESSLRQLKCHFTWNLMEGENSLDDFEDKVFYRTEFQNREFKATMCNLLAYLKHLLKGGQNEAA
 LECLRKAEEELIQEHADQAEIRSLVTWGNyawvyyHMGRLSDVQIYVDKVRHVCEKFSSPYRIEPELDC
 EEGWTRLKCGGNQNERAKVCFEKALEKKPKNPEFTSGLAIASYRLDNWPPSQNAIDPLRQAIRLNPDNQY
 LKVLALLKLHKMREEEEEEGEKEKLVVEALEKAPGVTDLRSAKFYRRKDEPKAIELLKKALEYIPNN
 AYLHCQIGCCYRAKVFQVMNLRNGMYGKRKLELIGHAVAHLKKADEANDLFRVCSILASLHALADQY
 EEAEYFQKEFSKELTPVAKQLLHLRYGNFQLYQMKCEDKAIHHFIEGVKINQKSREKEKMKDKLQKIAK
 MRLSKNGADSEALHVLAFLLQELNEKMQAEDSERGLESGLIPSASSWNGEWRIEMWCPLGYC

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001547

ORF Size: 1452 bp

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: [NM_001547.3](#), [NP_001538.3](#)

RefSeq Size: 3058 bp

RefSeq ORF: 1419 bp

Locus ID: 3433

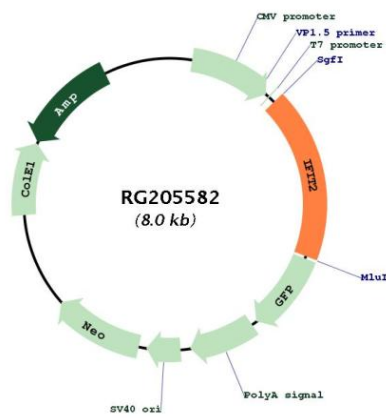
UniProt ID: [P09913](#)

Cytogenetics: 10q23.31

Domains: TPR

Gene Summary: IFN-induced antiviral protein which inhibits expression of viral messenger RNAs lacking 2'-O-methylation of the 5' cap. The ribose 2'-O-methylation would provide a molecular signature to distinguish between self and non-self mRNAs by the host during viral infection. Viruses evolved several ways to evade this restriction system such as encoding their own 2'-O-methylase for their mRNAs or by stealing host cap containing the 2'-O-methylation (cap snatching mechanism). Binds AU-rich viral RNAs, with or without 5' triphosphorylation, RNA-binding is required for antiviral activity. Can promote apoptosis.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG205582