

## Product datasheet for **MR207516**

### Ifit2 (NM\_008332) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ifit2 (NM_008332) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ifit2
Synonyms:	AV302338; Ifi54; P54
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR207516 representing NM\_008332  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGAGTACAACGAGTAAGGAGTCACTGGAGAGCAATCTGCGACAGCTAAAATGCCATTTACCTGGAACC  
 TGATAGCAGAAGATGAGTCCTTGATGAGTTTGGAGACAGGGTGTAAACAAGGATGAGTTTCAGAACAG  
 TGAGTTTAAAGCCACCATGTGCAACATACTGGCCTATGTAAGCACTGCAGAGGTCTAAATGAGGCAGCA  
 CTGCAATGCTTAGGGGAAGCTGAGGGCTTCATCCAGCAACAGCATCCTGACCAAGTAGAAATCAGAAGTC  
 TGGTCACCTGGGAAACTATGCTTGGGTCTACTATCACATGGGCCAGTTCTCAAAGGCTCAGGCTTATCT  
 GGATAAAGTGAACAGGTCTGCAAGAAGTTTTCCAGCCCTACAGGATTGAGAATCTGCTCTTGACTGT  
 GAGGAGGGTGGCCCGATTAAAGTGTACCAAGAACCAACGAGAGAGTGAAGGTGTGTTCCAGAAGG  
 CTCTGGAAAAGGACCCGAAGAACCAGAATTCACCTCTGGATGGCCATTGCGAACTACCGTCTGGATGA  
 CTGGCCAGCAAGGAATTACTGCATTGACTCTCTGGAGCAAGCCATTCACTGTCTCTGACAACACTTAT  
 GTTAAAGTCTCTTGGCACTGAAGCTTGACGCGGTACATAAAAAACCAAGCAATGGCGCTGGTTGAAGAAG  
 CCTTAAAGAAAAGACCCAAGTGAATAGATACACTCCTCAGGCGAGCCAGGTTTTATTGCAAGGTATATGA  
 CACAGACAGAGCTATACAGTTGCTTAGAAAAGCTTTGGAAAAGCTGCCAAACAACGCCTATGTGCATTAC  
 TATATGGGGTGTGTTATAGGTCAAAGTCCATCATATGTTGAACAGAAGGGAAATGGTATTTAGTGGGG  
 ATAGGAAGAAGTTAGAGGAACTAATACTGAGTGAATCACTTACGGAAAGCAGAGGAAATCAAGGA  
 GATGCTTGAATATTCCTGTAGCTTCCTTGCTGATCTTTATATCATAGCAAAAAGTATGACGAAGCCGAT  
 TACTACTCCAGAAAAGATTGAGCAAGGACCTCCCTCTGGCCCTAACAGTTACTCCACCTTCGGTATG  
 GCAACTTTCAGTTTTTTCAAATGAAGCGTCAAGACAAGGCTATCTACCATTATATGGAGGGTGAAGAAAT  
 AAAGAAGAAAACAATCCCCAAAAAAGATGAGAGAGAAACTTCAAAGAATTGCCCTAAGGCGGCTTCAT  
 GAAGATGAGTCTGATTCTGAGGCCTGCATATCTTGGCATTCTTCAGGAGAATGGAGGAGTCAAGCAAG  
 CTGATAAAGACTCTGAGAGGGGAGTGGACTCTGCAAACCAGGTACCTTCAGCATCTTTGGATGAAGCAGG  
 TGCTGAATAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR207516 representing NM\_008332  
 Red=Cloning site Green=Tags(s)

MSTTSKESLESNLRQLKCHFTWNLIAEDESLEDEFDRVFNKDEFQNSEFKATMCNILAYVKHCRGLNEAA  
 LQCLGEAEGFIQQQHPDQVEIRSLVTWGNyawvyyhmgqfSKAQAYLdkvkqvckkfSSPYRIENPALDC  
 EEGWARLKCTKNQNERVKVCFQKALEKDPKNPEFTSGWAIANYRLDDWPARNYCIDSLAQIQLSPDNTY  
 VKVLLALKLDAVHKNQAMALVEEALKKDPSAIDTLLRAARFYCKVYDTRAIQLLRKALEKLPNNAYVHY  
 YMGCCYRSKVHMLNRREMFVSGDRKKLEELIQLAVNHLRKAEEIKEMLEYSCLADLYIIIAKKYDEAD  
 YYFQKELSKDLPPGPKQLLHLRYGNFQFFQMKRQDKAIYHYMEGVKIKKKTIPQKKMREKLQRIALRRLH  
 EDESSEALHILAFLENGGGQQADKDSERGVDSANQVPSASLDEAGA EY

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/ja2339\\_c07.zip](https://cdn.origene.com/chromatograms/ja2339_c07.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**

**ACCN:** NM\_008332

**ORF Size:** 1410 bp

**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](mailto: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.

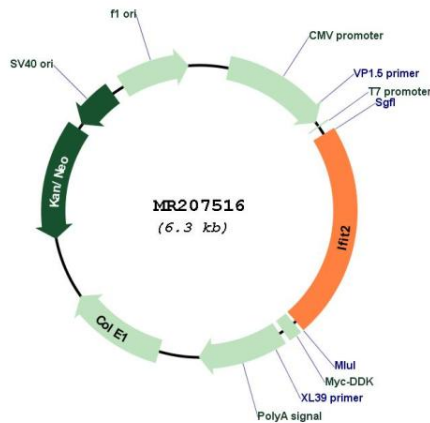
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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\\_008332.3, NP\\_032358.1](#)  
**RefSeq Size:** 3949 bp  
**RefSeq ORF:** 1413 bp  
**Locus ID:** 15958  
**UniProt ID:** [Q64112](#)  
**Cytogenetics:** 19 C1  
**MW:** 55.2 kDa

**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 MR207516