

Product datasheet for MR206340

Ifit3 (NM_010501) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ifit3 (NM_010501) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ifit3
Synonyms:	Ifi49; P49
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206340 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGTGAGGTCAACCGGAATCTCTGGAAGCGATCCTCCACAGCTGAAGTGCCATTTACCTGGAATT
TATTCAGGGAAGGAAGTATGTCCAGTCATATGGAAGACAGGGTGTGAACAGGTGCAACATTTAAACTC
TGAGGAGAAGGCAACAATGTATGACTTATTGGCTACATAAAGCACCTAGATGGCGAAAGCAAGGCCGCC
CTGGAGTGCTTAGGGCAAGCTGAAGATTAAGGAAGTCAGAGCACAATGATCAATCAGAAATTCGTCGAC
TGCTCACCTGGGAAACTACGCCTGGATCTACTATCACATGGGCCGTCTCTCAGAAGCTCAGGCTTACGT
TGACAAGGTGAGACAAGTTTGCCAAAAGTTTGGCAATCCTTACAGCATGGAATGCCCAGAACTTGAATGT
GAGGAAGGATGGACACGCCTAAAGTGTGGAAGAAATGAACGAGCAAAAATGTACTTTGAAAAGGCTCTAG
AAGAGAAGCCAAAGGACCCAGAGTGCTCCTCTGGGATGGCCATCGCCATGTTCCGCCTAGAAGAAAAACC
TGAGAAGCAGTTCTCCGTGGATGCTCTGAAGCAGGCCATGGAGTTGAATCCTCAGAACCAGTACCTGAAA
GTTCTCCTGGCCCTGAACTGCTGAGGATGGGAGAAGAAGCTGAAGGGGAGCGATTGATTAAGATGCTT
TGGGAAAGCTCCTAATCAAACGGATGTCCTCCAAAAGGCAGCTCAGTTTACAAGAAAAGGGTAACT
AGACAGAGCTATTGAGTTACTTGGAAAAGCACTGCGATCCACAGTGAACAACAGTCTCTACTCTTTG
GTCATGTGCCGTTACAGGAAATCTGGAGCAGCTACAGAATAAAGGAGATGCTGACAGCAGTGAAGAGAA
GACAGAGGATGGCAGAACTGAGACGATTAACGATGGAGTTCATGCAGAAGACTCTCAGAGGAGCGGAAG
TCTTTGAACTCCTACTCAGATCTCATCGATTTCCCGGAAGTAGAGAGATGCTATCAGATGGTCATCAGT
AAGGAGAGCCCCGATGTTGAGGAAGAAGACCTCTATGAGCGCTATTGCAACCTCCAGGAGTACCACAGGA
AGTCTGAAGACCTCGCAGCCCTGGAGTGTGTTGCAATTTCCAGAAATGAAAGGTCAATCGAGAAGGA
AGAGGTTAAAGAGCAAACA

ACGGTACGGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR206340 protein sequence
Red=Cloning site Green=Tags(s)

MSEVNRESLEAILPQLKCHFTWNLFRGSMSSHMEDRVCNQVEHLNSEEKATMYDLLAYIKHLDGESKAA
 LECLGQAE DLKSEHNDQSEIRRLVTWGNyawIYYHMGR LSEAQAYVDKVRQVCQKFANPYSMECPELEC
 EEGWTRLKCGRNERAKMYFEKALEEKPKDPECCSSGMAIAMFRLEEKPEKQF SVDALKQAMELNPNQY LK
 VLLALKLLRMGEEAEGERLIKDALGKAPNQTDV LQKAAQFYKKKGNDRAIELLGKALRSTVNNSP LYSL
 VMCRYREILEQLQNKGDADSSERRQMAELRRLTMEFMQKTLQRRRSPLNSYSDLIDFPEVERCYQMVIS
 KESPDVEEEDLYERYCNLQEYHRKSEDLAALECLLQFPRNERSIEKEEVKEQT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_010501

ORF Size: 1212 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_010501.1](#), [NM_010501.2](#), [NP_034631.1](#)

RefSeq Size: 1998 bp

RefSeq ORF: 1212 bp

Locus ID: 15959

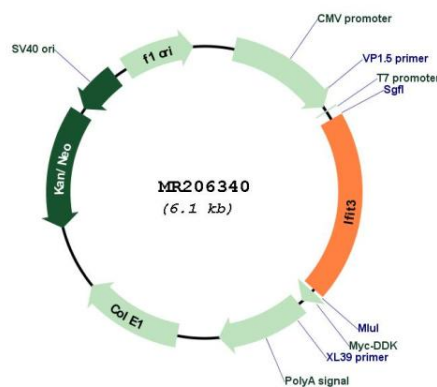
UniProt ID: [Q64345](#)

Cytogenetics: 19 C1

MW: 47.3 kDa

Gene Summary: IFN-induced antiviral protein which acts as an inhibitor of cellular as well as viral processes, cell migration, proliferation, signaling, and viral replication. Enhances MAVS-mediated host antiviral responses by serving as an adapter bridging TBK1 to MAVS which leads to the activation of TBK1 and phosphorylation of IRF3 and phosphorylated IRF3 translocates into nucleus to promote antiviral gene transcription. Exhibits an antiproliferative activity via the up-regulation of cell cycle negative regulators CDKN1A/p21 and CDKN1B/p27. Normally, CDKN1B/p27 turnover is regulated by COPS5, which binds CDKN1B/p27 in the nucleus and exports it to the cytoplasm for ubiquitin-dependent degradation. IFIT3 sequesters COPS5 in the cytoplasm, thereby increasing nuclear CDKN1B/p27 protein levels. Upregulates CDKN1A/p21 by downregulating MYC, a repressor of CDKN1A/p21. Can negatively regulate the apoptotic effects of IFIT2 (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR206340