

## Product datasheet for RC238232

### IFIT3 (NM\_001289758) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	IFIT3 (NM_001289758) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IFIT3
Synonyms:	CIG-49; cig41; GARG-49; IFI60; IFIT4; IRG2; ISG60; P60; RIG-G
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC238232 representing NM_001289758 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTACAACCTGTTGGCCTACATAAAACACCTAGATGGTAACAACGAGGCAGCCCTGGAATGCTTACGGC  
AAGCTGAAGAGTTAATCCAGCAAGAACATGCTGACCAAGCAGAAATCAGAAGTCTAGTCACTTGGGGAAA  
CTACGCCCTGGGTCTACTATCACTTGGGCAGACTCTCAGATGCTCAGATTTATGTAGATAAGTGAAACAA  
ACCTGCAAGAAATTTTCAAATCCATACAGTATTGAGTATTCTGAACTTGACTGTGAGGAAGGGTGGACAC  
AACTGAAGTGTGGAAGAAATGAAAGGGCGAAGGTGTGTTTTGAGAAGGCTCTGGAAGAAAAGCCCAACAA  
CCCAGAATTCTCCTCTGGACTGGCAATTGCGATGTACCATCTGGATAATCACCCAGAGAAACAGTTCTCT  
ACTGATGTTTTGAAGCAGGCCATTGAGCTGAGTCTGATAACCAATACGTCAGGTTCTCTTGGCCTGA  
AACTGCAGAAGATGAATAAAGAAGCTGAAGGAGAGCAGTTTGTGGAAGAAGCCTTGGAAAAGTCTCCTTG  
CCAAACAGATGTCCTCCGCAGTGCAGCCAAATTTACAGAAGAAAAGGTGACCTAGACAAAGCTATTGAA  
CTGTTTCAACGGGTGTTGGAATCCACACCAACAATGGCTACCTCTATCACCAGATTGGGTGCTGTACA  
AGGCAAAAGTAAGACAAATGCAGAATACAGGAGAATCTGAAGCTAGTGGAAATAAAGAGATGATTGAAGC  
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AAAAGCAACAATCCCATCAGCGCTACTGCAACCTCAGAAATATAATGGGAAGTCTGAAGACACTGCTGT  
GCAACATGGTTTAGAGGGTTTGTCCATAAGCAAAAAATCAACTGACAAGGAAGAGATCAAAGACCAACCA  
CAGAATGTATCTGAAAATCTGCTCCACAAAATGCACCAAAATTATTGGTATCTTCAAGGATTAATTCATA  
AGCAGAATGGAGATCTGCTGCAAGCAGCCAAATGTTATGAGAAGGAAGTGGCCCGCTGCTAAGGGATGC  
CCCTTCAGGCATAGGCAGTATTTTCTGTCAGCATCTGAGCTTGAGGATGGTAGTGAGGAAATGGCCAG  
GGCGCAGTCAGCTCCAGTCCCAGAGAGCTCCTCTCTAACTCAGAGCAACTGAAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC238232 representing NM\_001289758  
Red=Cloning site Green=Tags(s)

MYNLLAYIKHLDGNNEAALECLRQAEELIQQEHADQAEIRSLVTWGNyawvyyHLGRLSDAQIYVDKVKQ  
 TCKKFSNPYSIEYSELDCEEGWTQLKCGRNERAKVCFEKALEEKPNPEFSSGLAIAMYHLDNHPEKQFS  
 TDVLKQAIELSPDNQYVKVLLGLKLQKMNKEAEGEQFVEEALEKSPCQTDVLRSAAKFYRRKGLDKAIE  
 LFQRVLESTPNNGYL YHQIGCCYKAKVRQMONTGESEASGNKEMIEALKQYAMDYSNKALEKGLNPLNAY  
 SDLAEFLETECYQTPFNKEVPDAEKQSSHQRYCNLQKYNGKSEDTAVQHGLEGLSISKKSTDKEEKDQP  
 QNVSENLLPQNAPNYWYLQGLIHKQNGDLLQAAKCYEKELGRLLRDAPSGIGSIFLSASELEDGSEEMGQ  
 GAVSSSPRELLSNSEQLN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

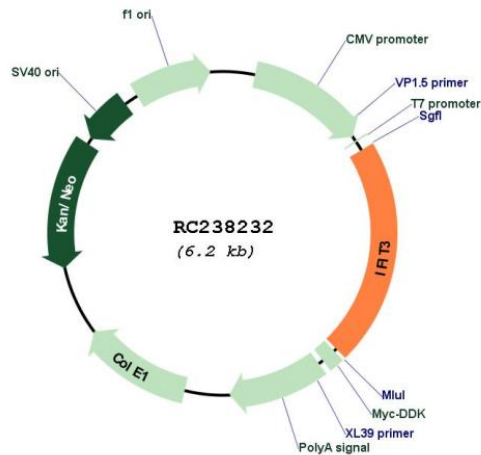
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001289758

<b>ORF Size:</b>	1314 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001289758.2</a>
<b>RefSeq Size:</b>	2696 bp
<b>RefSeq ORF:</b>	1317 bp
<b>Locus ID:</b>	3437
<b>Cytogenetics:</b>	10q23.31
<b>MW:</b>	50.3 kDa
<b>Gene Summary:</b>	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.[UniProtKB/Swiss-Prot Function]