

## Product datasheet for **SC302530**

### IFIT3 (NM\_001031683) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	IFIT3 (NM_001031683) Human Untagged Clone
Tag:	Tag Free
Symbol:	IFIT3
Synonyms:	CIG-49; cig41; GARG-49; IFI60; IFIT4; IRG2; ISG60; P60; RIG-G
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene sequence for NM\_001031683 edited  
 GCTTGGAAATCAGTAAGCTAAAAACAAAATCAACCGGGACCCCAGCTTTTCAGAACTGCAG  
 GGAAACAGCCATCATGAGTGAGGTCAACAAGAATCCCTGGAGAAAATCCTTCCACAGCT  
 GAAATGCCATTTACCTGGAAGTTATTTCAAGGAAGACAGTGTCTCAAGGGATCTAGAAGA  
 TAGAGTGTGTAACCAGATTGAATTTTTAAACACTGAGTTCAAAGCTACAATGTACAACCT  
 GTTGGCCTACATAAAAACACCTAGATGGTAACAACGAGGCAGCCCTGGAATGCTTACGGCA  
 AGCTGAAGAGTTAATCCAGCAAGAACATGCTGACCAAGCAGAAAATCAGAAGTCTAGTCAC  
 TTGGGGAAAACACGCCTGGGTCTACTATCACTTGGGCAGACTCTCAGATGCTCAGATTTA  
 TGTAGATAAGGTGAAACAAACCTGCAAGAAATTTTCAAATCCATACAGTATTGAGTATTC  
 TGAACCTTGACTGTGAGGAAGGGTGGACACAACCTGAAGTGTGGAAGAAATGAAAGGGCGAA  
 GGTGTGTTTTGAGAAGGCTCTGGAAGAAAAGCCCAACAACCCAGAATTCTCCTCTGGACT  
 GGCAATTGCGATGTACCATCTGGATAATCACCCAGAGAAACAGTTCTCTACTGATGTTTT  
 GAAGCAGGCCATTGAGCTGAGTCTGATAACCAATACGTCAAGGTTCTCTTGGCCTGAA  
 ACTGCAGAAGATGAATAAAGAAGCTGAAGGAGAGCAGTTTGTGAAGAAGCCTTGGAAAA  
 GTCTCCTTGCCAAACAGATGTCTCCGAGTGCAGCCAAATTTACAGAAGAAAAGGTGA  
 CCTAGACAAAGCTATTGAACTGTTTCAACGGGTGTTGGAATCCACACCAAAACAATGGCTA  
 CCTCTATCACCAGATTGGGTGCTGCTACAAGGCAAAAAGTAAGACAAATGCAGAATACAGG  
 AGAATCTGAAGCTAGTGGAAATAAAGAGATGATTGAAGCACTAAAGCAATATGCTATGGA  
 CTATTCGAATAAAGCTCTTGAGAAGGGACTGAATCCTCTGAATGCATACTCCGATCTCGC  
 TGAGTTCTGGAGACGGAATGTTATCAGACACCATTCAATAAGGAAGTCCCTGATGCTGA  
 AAAGCAACAATCCCATCAGCGCTACTGCAACCTCAGAAAATAAATGGGAAGTCTGAAGA  
 CACTGCTGTGCAACATGGTTTAGAGGGTTTGTCCATAAGCAAAAATCAACTGACAAGGA  
 AGAGATCAAAGACCAACCACAGAATGTATCTGAAAATCTGCTTCCACAAAATGCACAAA  
 TTATTGGTATCTTCAAGGATTAATTCATAAAGCAGAATGGAGATCTGCTGCAAGCAGCCAA  
 ATGTTATGAGAAGGAAGTGGGCCCTGCTAAGGGATGCCCTTTCAGGCATAGGCAGTAT  
 TTTCTGTGAGCATCTGAGCTTGAGGATGGTAGTGAGGAAATGGGCCAGGGCGCAGTCAG  
 CTCCAGTCCCAGAGAGCTCCTCTCTAACTCAGAGCAACTGAACTGAGACAGAGGAGGAAA  
 ACAGAGCATCAGAAGCCTGCAGTGGTGGTTGTGACGGGTAGGACGATAGGAAGACAGGGG  
 GCCCAACCTGGGATTGCTGAGCAGGGAAGCTTTCATGTTGCTCTAAGGTACATTTTTTA  
 AAGAGTTGTTTTTGGCCGGGCGCAGTGGCTCATGCCTGTAATCCAGCACTTTGGGAGG  
 CCGAGGTGGGCGGATCACGAGGTCTGGAGTTTGTAGACCATCCTGGCTAACACAGTGAAT  
 CCCGTCTCTACTAAAAATACAAAAAATTAGCCAGGCGTGGTGGCTGGCACCTGTAGTCCC  
 AGCTACTTGGGAGGCTGAGGCAGGAGAATGGCGTGAACCTGGAAGGAAGGGTTGCAGAG  
 AGCCAAGATTGCGCCCCTGCACTCCAGCCTGGGCAACAGAGCAAGACTCCATCTCAAAAA  
 AAAAAAAAAAAAAA

**Restriction Sites:** NotI-NotI

**ACCN:** NM\_001031683

**Insert Size:** 2000 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** The ORF of this clone has been fully sequenced and found to be a perfect match to NM\_001031683.1.

**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\\_001031683.1](#), [NP\\_001026853.1](#)

**RefSeq Size:** 1999 bp

**RefSeq ORF:** 1473 bp

**Locus ID:** 3437

**UniProt ID:** [O14879](#)

**Cytogenetics:** 10q23.31

**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.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) differs in the 5' UTR and 5' coding region compared to variant 1. Variants 1 and 2 both encode isoform a, using different start codons but encoding identical proteins. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.