

Product datasheet for **SC111218**

IFIT5 (NM_012420) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IFIT5 (NM_012420) Human Untagged Clone
Tag:	Tag Free
Symbol:	IFIT5
Synonyms:	ISG58; P58; RI58
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC111218 sequence for NM_012420 edited (data generated by NextGen Sequencing)

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ATGAGTGAATTCGTAAGGACACCTTGAAGGCCATTCTGTTGGAGTTAGAATGTCATTTT
ACATGGAATTTACTTAAGGAAGACATTGATCTGTTTGAGGTAGAAGATACAATTGGGCAA
CAGCTTGAATTTCTTACCACAAAATCTAGACTTGCTCTTTATAACCTATTGGCCTATGTG
AAACACCTAAAAGGCCAAAATAAAGACGCCCTTGAGTGCCTTGAACAAGCAGAAGAAATA
ATCCAGCAAGAACAACACTCAGACAAAAGAAGAAGTACGAAGCCTGGTCACTTGGGAAACTAT
GCCTGGGTGATTATCACATGGACCAGCTTGAAGAAGCTCAGAAGTATACAGGTAAGATA
GGGAATGTCTGTAAGAAATTGTCCAGTCCTTCTAACTACAAGTTGGAGTGCCTGAGACT
GACTGTGAGAAAGGCTGGGCACTCTTGAATTTGGAGGAAAGTATTATCAAAAGGCTAAA
GCGGCTTTTGAAGGCTCTGGAAGTGGAGCCTGACAATCCAGAATTTAACATCGGCTAT
GCTATCACAGTGTATCGGCTGGATGATTCTGATAGAGAAGGGTCTGTAAGAGCTTTTCT
CTGGGCTTTTGAAGGCTGTACCCTGAACCCAGATAACAGCTATATTAAGGTTTTT
CTGGCACTGAAGCTTCAAGATGTACATGCAGAAGCTGAAGGGGAAAAGTATATTGAAGAA
ATCCTGGACCAAATATCATCCCAGCCTTACGTCCTTCGTTATGCAGCCAAGTTCTATAGG
AGAAAAAATTCCTGGAACAAAGCTCTCGAACTTTTAAAAAAGGCCTTGGAGGTGACACCA
ACTTCTTCTTTCCTGCATCACCAGATGGGACTTTGCTACAGGGCACAAATGATCCAAATC
AAGAAGGCCACACACAACAGACCTAAAGGAAAGGATAAACTAAAGGTTGATGAGCTGATT
TCATCTGCTATATTTCAATTTCAAAGCAGCCATGGAACGAGACTCTATGTTTGCATTTGCC
TACACAGACCTGGCCAACATGTACGCTGAAGGAGGCCAGTATAGCAATGCTGAGGACATT
TTCCGAAAGCTTTCGCTCTGGAGAACAATAACCGATGATCACAACATCAGATCCATTAC
CACTATGGCCGCTTTCAGGAATTTACCCTGAAATCAGAAAATACTGCCATCCATCATTAT
TTAGAAGCCTTAAAGGTCAAAGACAGATCACCCCTTCGCACCAAAGTACAAAGTCTG
AAGAAATTTGCTACCAAGAGACTTTGTCACAATGCTTTAGATGTGCAGAGTTTAAAGTCC
CTAGGGTTTGTACAAGCTGGAAGGAGAAAAGAGGCAAGCTGCTGAGTACTATGAGAAG
GCACAAAAGATAGATCCAGAAAATGCAGAATTCCTGACTGCTCTCTGTGAGCTCCGACTT
CCATTTAA
    
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Clone variation with respect to NM_012420.2

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_012420 unedited
TACGACTCCTATGGGGCGGCCGCGATTCCGGCAGGAGTCAATCTCCAGTTTCCTGTTT
TTGCTGGGGCTGGGGTCTCTCCTTTAACAAAGACACGCCGCGCGGCGGAGTCCAGGGCT
GCAGAGGCTGGCGCGCGCACGCGCACGCCACCGCGCGGCTTCCCGCGGTCCC
CGGTGCTGAGGAGAGAGCGATCCGAGGGACTGCGCCGCCCGGACGGCTGCAGAGCGCTG
CCATCATGAGTGAATTCGTAAGGACACCTTGAAGGCCATTCTGTTGGAGTTAGAATGTC
ATTTTACATGGAATTTACTTAAGGAAGACATTGATCTGTTTGAGGTAGAAGATACAATTG
GGCAACAGCTTGAATTTCTTACCACAAAATCTAGACTTGCTCTTTATAACCTATTGGCCT
ATGTGAAACACCTAAAAGGCCAAAATAAAGACGCCCTTGAGTGCCTTGAACAAGCAGAAG
AAATAATCCAGCAAGAACAACACTCAGACAAAAGAAGAAGTACGAAGCCTGGTCACTTGGGAA
ACTATGCCTGGGTGATTATCACATGGACCAGCTTGAAGAAGCTCAGAAGTATACAGGTA
AGATAGGGAATGTCTGTAAGAAATTGTCCAGTCTTCTAACNTACAAGTTGGAGTGCCT
GAGACTGACTGTGAGAAAGGCTGGGCACTCTTGAATTTGGAGGAAAGTATTATCAAAA
GGCTAAAGCGGCTNTTGAAGCTCTGGNAGTGGAGCCTGACATCCAGATNTACATCGGC
TTGCTATCACAGTGTATCGGCTGGATGATTCTGATAGAGAGGGTCTGTAAGAGCTTCTC
TGGGGCCTTGAAGGCTGGTACCTGACCAGATACAGTTANTTAGGTTTTCTGCCTGAGC
TTCAAAGTACTGCANACTGAGGGGAAAGTTATGAGAATCTGACAATTCATCCAAGTTC
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_012420 unedited TTTTTTTTTTTTTTTTAAGTAAAACAAAGNATTTTAAAAATTAATACGTGAGAAACACT GCAGTATATATGTATGTCTGATTACGCATAGAAAAAATCTGGAAGTTTACATATCAAAT TATAAGTTATAAGTTTACCTTGAGGGTGTGGAAGTGTGGTAGGGTGAGAGGACTGCTCTC ATTTTTAAATTCACATACTTTTGAATTTTTTTTTGAAATTTACAGTGAGAATTCATTAT TTTTATAATAATCAAACCATAATAGAAATTTTAAAGATTACATTGGAGGAATGGAGAATTAATCACAT ACACACACATACATAATAATTTTAAAGAGTTACATTGGAGGAATGGAGAATTAATCACAT GGTACTTTTCCACTAATACTGTGATGGTACATAATTGTGTAGTCGGTAATCAAAGAACT ACATTAGAGAAGCCACATTAAGTAACATCCGAATTAAGTCCCTGGGATAAGAGCCC TCAAGCAGCGACCCCTCAAGGTGGATATTAAGTCCCTGGGATAAGAGCCC AGTATCTACATGAAAAAACAACATTCTGAAAATTTACATTAAAAAAAGCTTCATAG AAGTCACTTTGAAATGCTAAAATAGCCAAAGGCCAGAAATTGAGGGTATAAAAACTCCAT T
Restriction Sites:	NotI-NotI
ACCN:	NM_012420
Insert Size:	3410 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).
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:	<ol style="list-style-type: none"> 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:	<u>NM_012420.1</u> , <u>NP_036552.1</u>
RefSeq Size:	3906 bp
RefSeq ORF:	1449 bp
Locus ID:	24138
UniProt ID:	<u>Q13325</u>
Cytogenetics:	10q23.31
Domains:	TPR

Gene Summary:

Interferon-induced RNA-binding protein involved in the human innate immune response. Has a broad and adaptable RNA structure recognition important for RNA recognition specificity in antiviral defense. Binds precursor and processed tRNAs as well as poly-U-tailed tRNA fragments (PubMed:25092312, PubMed:23317505, PubMed:23774268). Specifically binds single-stranded RNA bearing a 5'-triphosphate group (PPP-RNA), thereby acting as a sensor of viral single-stranded RNAs. Single-stranded PPP-RNAs, which lack 2'-O-methylation of the 5' cap and bear a 5'-triphosphate group instead, are specific from viruses, providing a molecular signature to distinguish between self and non-self mRNAs by the host during viral infection. Directly binds PPP-RNA in a non-sequence-specific manner (PubMed:23334420). Also recognizes and selectively binds AT-rich dsDNA (PubMed:23774268). Additionally, as a mediator in innate immunity, regulates positively IKK-NFKB signaling by synergizing the recruitment of IKK to MAP3K7 (PubMed:26334375).[UniProtKB/Swiss-Prot Function]