

Product datasheet for **SC118744**

IRF1 (NM_002198) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IRF1 (NM_002198) Human Untagged Clone
Tag:	Tag Free
Symbol:	IRF1
Synonyms:	IRF-1; MAR
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_002198, the custom clone sequence may differ by one or more nucleotides

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ATGCCATCACTCGGATGCGCATGAGACCCTGGCTAGAGATGCAGATTAATTCCAACAAATCCCGGGC
TCATCTGGATTAATAAGAGGAGATGATCTCCAGATCCCATGGAAGCATGCTGCCAAGCATGGCTGGGA
CATCAACAAGGATGCCTGTTTGTCCGGAGCTGGGCCATCACACAGGCCGATACAAAGCAGGGGAAAAG
GAGCCAGATCCCAAGACGTGGAAGGCCAACTTTCGCTGTGCCATGAACTCCCTGCCAGATATCGAGGAGG
TGAAAGACCAGAGCAGGAACAAGGGCAGCTCAGCTGTGCGAGTGTACCGGATGCTTCCACCTCTACCAA
GAACCAGAGAAAAGAAAAGTGAAGTCCAGCCGAGATGCTAAGAGCAAGGCCAAGAGGAAGTCATGT
GGGGATCCAGCCCTGATACCTTCTGATGGACTCAGCAGCTCCACTCTGCCTGATGACCACAGCAGCT
ACACAGTTCAGGCTACATGCAGGACTTGAGGTGGAGCAGGCCCTGACTCCAGCACTGTGCCATGTGC
TGTCAGCAGCACTCTCCCGACTGGCACATCCAGTGAAGTTGTGCCGGACAGCACCAGTGATCTGTAC
AACTTCCAGGTGTCAACCATGCCCTCCACCTCTGAAGTACAACAGATGAGGATGAGGAAGGGAAATTAC
CTGAGGACATCATGAAGCTCTTGAGCAGTGGAGTGGCAGCCAACAACGTGGATGGGAAGGGGTACCT
ACTCAATGAACCTGGAGTCCAGCCACCTCTGTCTATGGAGACTTTAGCTGTAAGGAGGAGCCAGAAATT
GACAGCCAGGGGGGATATTGGCTGAGTCTACAGCGTGTCTTACAGATCTGAAGAACATGGATGCCA
CCTGGCTGGACAGCCTGCTGACCCAGTCCGGTTGCCCTCCATCCAGGCCATTCCCTGTGACCCGTAG
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5' Read Nucleotide Sequence:

```
>OriGene 5' read for NM_002198 unedited
TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCTTAGTCGAGGCA
AGACGTGCGCCCGAGCCCCGCCGAACCGAGGCCACCCGGAGCCGTGCCAGTCCACGCCG
GCCGTGCCCGCGGCCTTAAGAACCCGGCAACCTCTGCCTTCTTCCCTCTTCCACTCGGA
GTCGCGCTTCGCGCGCCCTCACTGCAGCCCCTGCGTCGCCGGGACCCTCGCGCGGACCG
CCGATCGTCTCTGCAGCAGGCCAACATGCCATCACTCGGATGCGCATGAGACCCTGG
CTAGAGATGCAGATTAATTCCAACCAAATCCCGGGGCTCATCTGGATTAATAAAGAGGAG
ATGATCTTCCAGATCCCATGGAAGCATGCTGCCAAGCATGGCTGGGACATCAACAAGGAT
GCCTGTTTGTTCGGAGCTGGGCCATTACACAGGCCGATACAAAGCAGGGGAAAAGGAG
CCAGATCCCAAGACGTGGAAGGCCAACTTTCGCTGTGCCATGAACTCCCTGCCAGATATC
GAGGAGGTGAAAGACCAGAGCAGGAACAAGGCCAGCTCAGCTGTGCGAGTGTACCGGATG
CTTCCACCTCTCACCAAGAACCAGAGAAAAGAAAGAGTTTGAAGTCCAGCCGAGATGC
TAAGAGCAAGGCCAGNNAGGAAGTCATGTGGGGGATTCCAGCCCTGATACCTTCTCTGA
TGGACTCAGCAGTCCACTCTGCCTGATGACCACAGCACCTACACAGTTCAGGCTCATG
CAGACTTTGGGAGGGGGAAACAGGCCCTGACTCACCTGGNNNCCCGGGTGTGTACAG
CACTCTCCCCGACTGCACATCCAAANGGAAAGGTGGCGCGGACAGACCCCGGGATCTGT
CAACT
```

3' Read Nucleotide Sequence:

```
>OriGene 3' read for NM_002198 unedited
GGCACGCAATCTAAAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTGGGGCCCGGGTGGAGT
GCAATGGCATGTTCTCGGCTCACTGCAACCTCCACCTCCCAGGTTCAAGCGATTCTTTG
CCTCAGCCTCCTGAGTAGCTGGGATTACAAGCACCCGCAACCACGCCAGCTAATTTTTG
CATTTTTAGTAAAATGGAGTTTACCAGGCTGGTCTCAAACCTCTGACCTCAGGTGATC
CACCCATCTCGGCTCCCAAAGTCTGGGATTACAGGTGTGAGCCACCGCCTGTCCGA
AAGGATTTTATAACAGATGCATGTCCTGTTCACCCCAAAGTCAAGTTCAAGCGGGATGC
CAATAATAAGTCCATCAGTGTTCATAAAAAGTAAAATCATCTACAAGGCAAAATTTCTC
TCTAAAAGGCCACACCTTATAAAACAATTTACTTTTTTATAAAAAGACAAATGTACATA
TTTACACACGTCCTTATGTGTTACACATGACTTAAAGGCTAAATGACATTTACAATTTT
AAGTTATACCAAGGCGCCTCACACTTACCTCCCTGGGCCCTGTTGAAGGCCTGCTGGGGC
TTGAAGGGGCGGTGGGCCCTAGCCACGCCCTGTTTAAATAAACGCAAAGGCCAAAATCT
CGGTGAAAAGTTAATGCTCACCCCTGATCAAAATGTGGCTTGATCCCACAAAATTTCC
AATTGTTTTTCCACTCCCCCCCCATCAGGAGCCAGGACACCCCTCTGAGGCTGAGGA
ACCCTGCCAGAGAACCCTTTTCTCAATATACCGCGTTTGGAAACACACCCCGGCTA
TTTTAAATGGGGTTATTTTTTGCAACCAATATATATCGCCATTTTTTACC GCATACCC
ACCTGGATCGTGCCTTACACCCTGCGCCCCCGCCGATCCCAGTCACATCCTTTTNTTA
TACCCCTTACACCGGAC
```

Restriction Sites:

NotI-NotI

ACCN:

NM_002198

Insert Size:

2600 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 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](#)

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_002198.1](#), [NP_002189.1](#)

RefSeq Size: 2035 bp

RefSeq ORF: 978 bp

Locus ID: 3659

UniProt ID: [P10914](#)

Cytogenetics: 5q31.1

Domains: IRF

Protein Families: Druggable Genome, Transcription Factors

Gene Summary: The protein encoded by this gene is a transcriptional regulator and tumor suppressor, serving as an activator of genes involved in both innate and acquired immune responses. The encoded protein activates the transcription of genes involved in the body's response to viruses and bacteria, playing a role in cell proliferation, apoptosis, the immune response, and DNA damage response. This protein represses the transcription of several other genes. As a tumor suppressor, it both suppresses tumor cell growth and stimulates an immune response against tumor cells. Defects in this gene have been associated with gastric cancer, myelogenous leukemia, and lung cancer. [provided by RefSeq, Aug 2017]