

## Product datasheet for RC203500

### IRF1 (NM\_002198) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	IRF1 (NM_002198) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IRF1
Synonyms:	IRF-1; MAR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203500 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCATCACTCGGATGCGCATGAGACCTGGCTAGAGATGCAGATTAATCCAACCAATCCCGGGC  
TCATCTGGATTAATAAGAGGAGATGATCTCCAGATCCCATGGAAGCATGCTGCCAAGCATGGCTGGGA  
CATCAACAAGGATGCCTGTTTGTCCGGAGCTGGGCCATTCACACAGGCCGATACAAAGCAGGGGAAAAG  
GAGCCAGATCCAAGACGTGGAAGGCCAACTTTCGCTGTGCCATGAACCTCCGAGATATCGAGGAGG  
TGAAAGACCAGAGCAGGAACAAGGCAGCTCAGCTGTGCGAGTGTACCGGATGCTCCACCTCTCACCAA  
GAACCAGAGAAAAGAAAAGTGAAGTCCAGCCGAGATGCTAAGAGCAAGGCCAAGAGGAAGTCATGT  
GGGGATTCCAGCCCTGATACCTTCTGATGGACTCAGCAGCTCCACTCTGCCTGATGACCACAGCAGCT  
ACACAGTTCAGGCTACATGCAGGACTTGGAGGTGGAGCAGGCCCTGACTCCAGCACTGTGCGCATGTGC  
TGTGAGCAGCACTCTCCCGACTGGCACATCCCAGTGAAGTGTGCCGGACAGCACCAGTGATCTGTAC  
AACTCCAGGTGTCAACCATGCCCTCCACCTCTGAAGTACAACAGATGAGGATGAGGAAGGAAATTAC  
CTGAGGACATCATGAAGCTCTTGAGCAGTGGAGTGGCAGCCAACAACGTGGATGGGAAGGGTACCT  
ACTCAATGAACCTGGAGTCCAGCCACCTCTGTCTATGGAGACTTAGCTGTAAGGAGGAGCCAGAAATT  
GACAGCCAGGGGGGATATTGGCTGAGTCTACAGCGTGTCTTACAGATCTGAAGAACATGGATGCCA  
CCTGGCTGGACAGCCTGCTGACCCAGTCCGGTTGCCCTCCATCCAGGCCATTCCCTGTGCACCG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC203500 protein sequence  
Red=Cloning site Green=Tags(s)

MPITRMRMRPWLEMQINSNQIPLIWINKEEMIFQIPWKHAAKHGWDINKDACLFRSWAIHTGRYKAGEK  
 EPDPKTWKANFRCAMNSLPDIEEVKQSRNKGSSAVRVYRMLPPLTKNQRKERKSKSSRDAKSKAKRKSC  
 GDSSPDTFSDGLSSSTLPDDHSSYTVPGYMQDLEVEQALTPALSPCAVSSSTLPDWHIPVEVVPDSTSDLY  
 NFQVSPMPSTSEATTTDEDEEGKLPEDIMKLLLEQSEWQPTNVDGKGYLLNEPGVQPTSVYGDFSCKEEPEI  
 DSPGGDIGLSLQRVFTDLKNMDATWLDLSLLTPVRLPSIQAIPCAP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6283\\_b01.zip](https://cdn.origene.com/chromatograms/mk6283_b01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_002198

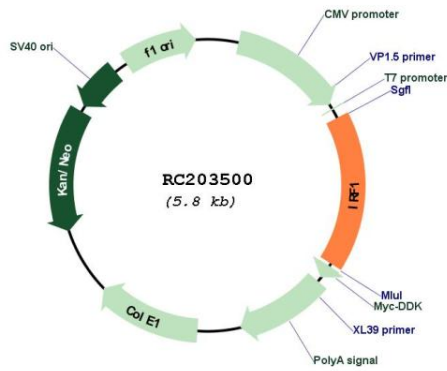
**ORF Size:** 975 bp

**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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

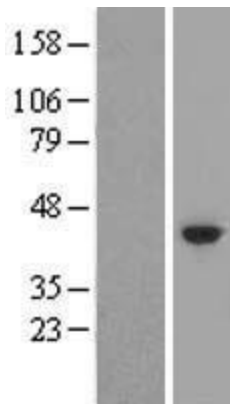
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

<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_002198.3</a>
<b>RefSeq Size:</b>	3567 bp
<b>RefSeq ORF:</b>	978 bp
<b>Locus ID:</b>	3659
<b>UniProt ID:</b>	<a href="#">P10914</a>
<b>Cytogenetics:</b>	5q31.1
<b>Domains:</b>	IRF
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>MW:</b>	36.5 kDa
<b>Gene Summary:</b>	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]

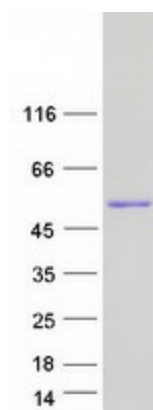
Product images:



Circular map for RC203500



Western blot validation of overexpression lysate (Cat# [LY419474]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203500 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified IRF1 protein (Cat# [TP303500]). The protein was produced from HEK293T cells transfected with IRF1 cDNA clone (Cat# RC203500) using MegaTran 2.0 (Cat# [TT210002]).