

## Product datasheet for RC213055

### OAS1 (NM\_016816) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	OAS1 (NM_016816) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OAS1
Synonyms:	E18/E16; IFI-4; OIAS; OIASI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC213055 representing NM_016816 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATGGATCTCAGAAATACCCAGCCAAATCTCTGGACAAGTTCATTGAAGACTATCTCTTGCCAGACA  
CGTGTTCGCGATGCAAATCAACCATGCCATTGACATCATCTGTGGTTCCTGAAGGAAAGGTGCTTCCG  
AGGTAGCTCTACCCTGTGTGTGTCCAAGGTGGTAAAGGGTGGCTCCTCAGGCAAGGGCACCACCCTC  
AGAGGCCGATCTGACGCTGACCTGGTTGTCTTCTCAGTCCTCTCACCACCTTTTCAGGATCAGTTAAATC  
GCCGGGAGAGTTTCATCCAGGAAATTAGGAGACAGCTGGAAGCCTGTCAAAGAGAGAGAGCATTTCGGT  
GAAGTTTGAGGTCCAGGCTCCACGCTGGGCAACCCCGTGCCTCAGCTTCGTAAGTTCGCTCCAG  
CTCGGGGAGGGGGTGGAGTTCGATGTGCTGCCTTTGATGCCTGGGTGAGTTGACTGGCGGTATA  
AACCTAACCCCAAACTATGTCAAGCTCATCGAGGAGTGCACCGACCTGCAGAAAGAGGGCGAGTTCTC  
CACCTGCTTACAGAACTACAGAGAGACTTCTGAAGCAGCGCCCAACCAAGCTCAAGAGCTCATCCGC  
CTAGTCAAGCACTGGTACCAAAATTGTAAGAAGAAGCTTGGGAAGCTGCCACCTCAGTATGCCCTGGAGC  
TCCTGACGGTCTATGCTTGGGAGCGAGGGAGCATGAAAACACATTTCAACACAGCCAGGGATTTCCGGAC  
GGTCTTGAATTAGTCATAAACTACCAGCAACTCTGCATCTACTGGACAAAGTATTATGACTTTAAAAAC  
CCCATTATTGAAAAGTACCTGAGAAGGCAGCTCACGAAACCCAGGCTGTGATCTGGACCCGGCGGACC  
CTACAGGAAACTTGGGTGGTGGAGACCCAAAGGGTGGAGGCAGCTGGCAAGAGGCTGAGGCCTGGCT  
GAATTACCATGCTTTAAGAATTGGGATGGGTCCCCAGTGAAGTCTGCTGGATTCTGCTGGTGAAGCAAC  
AGTGCAGACGATGAGACCGACGATCCCAGGAGGTATCAGAAATATGGTTACATTGGAACACATGAGTACC  
CTCATTCTCTCATAGACCCAGCACACTCCAGGCAGCATCCACCCACAGGCAGAAGAGGACTGGACCTG  
CACCATCTC

**ACGGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >RC213055 representing NM\_016816  
Red=Cloning site Green=Tags(s)

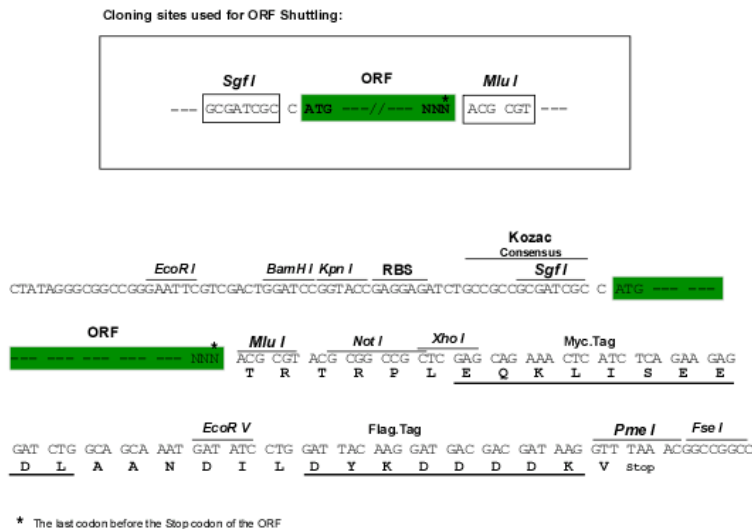
MMDLRNTPAKSLDKFIEDYLLPDTCFRMQINHAIDIICGFLKERCFRGSSYPVCVSKVVKGGSSGKGTTL  
 RGRSDADLVVFLSPLTTFQDQLNRRGEFIQEIRRQLEACQRERAFSVKFEVQAPRWGNPRALSFLVSSLQ  
 LGEGVEFDVLPAFDALGQLTGGYKPNPQIYVKLIEECTDLQKEGEFSTCFTELQRDFLKQRPTKLSLIR  
 LVKHWYQNCCKKLGKLPQYALELLTVYAWERGSMTKHFNTAQGFRTVLELVINYQQLCIYWTKYYDFKN  
 PIIIEKYLRRLTKPRPVILDPADPTGNLGGDPKGWRQLAQEAELNYPCKFNWDGSPVSSWILLAESN  
 SADDETDDPRRYQKYGYIGTHEYPHFSHRPSTLQAASTPQAEEDWTCTIL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8057\\_d01.zip](https://cdn.origene.com/chromatograms/mk8057_d01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_016816

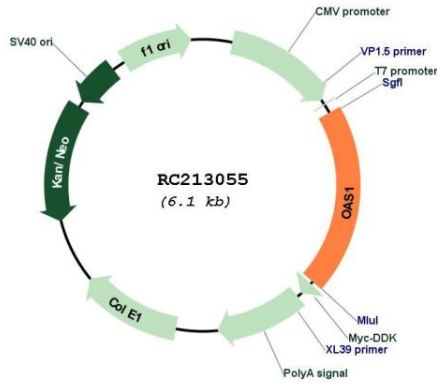
**ORF Size:** 1200 bp

**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.

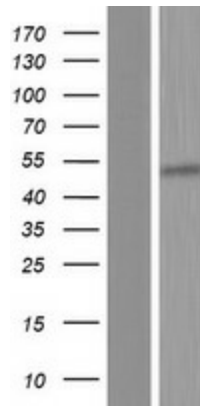
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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>	<u><a href="#">NM_016816.4</a></u>
<b>RefSeq Size:</b>	1590 bp
<b>RefSeq ORF:</b>	1203 bp
<b>Locus ID:</b>	4938
<b>UniProt ID:</b>	<u><a href="#">P00973</a></u>
<b>Cytogenetics:</b>	12q24.13
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	45.8 kDa
<b>Gene Summary:</b>	This gene is induced by interferons and encodes a protein that synthesizes 2',5'-oligoadenylates (2-5As). This protein activates latent RNase L, which results in viral RNA degradation and the inhibition of viral replication. Alternative splicing results in multiple transcript variants with different enzymatic activities. Polymorphisms in this gene have been associated with susceptibility to viral infection and diabetes mellitus, type 1. A disease-associated allele in a splice acceptor site influences the production of the p46 splice isoform. This gene is located in a cluster of related genes on chromosome 12. [provided by RefSeq, Feb 2016]

Product images:



Circular map for RC213055



Western blot validation of overexpression lysate (Cat# [LY413832]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213055 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).