

## Product datasheet for **RG213055**

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	OAS1 (NM_016816) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	OAS1
Synonyms:	E18/E16; IFI-4; OIAS; OIASI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG213055 representing NM_016816 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATGGATCTCAGAAATACCCAGCCAAATCTCTGGACAAGTTCATTGAAGACTATCTCTTGCCAGACA  
CGTGTTCGCGATGCAAATCGACCATGCCATTGACATCATCTGTGGTTCCTGAAGGAAAGGTGCTTCCG  
AGGTAGCTCTACCCTGTGTGTGTCCAAGGTGGTAAAGGTGGCTCCTCAGGCAAGGGCACCACCCTC  
AGAGGCCGATCTGACGCTGACCTGGTTGTCTTCCTCAGTCCTCTCACCACCTTTTCAGGATCAGTTAAATC  
GCCGGGAGAGTTCATCCAGGAAATTAGGAGACAGCTGGAAGCCTGTCAAAGAGAGAGACTTTCCGT  
GAAGTTTGAGGTCCAGGCTCCACGCTGGGCAACCCCGTGCCTCAGCTTCGTACTGAGTTCGCTCCAG  
CTCGGGGAGGGGTGGAGTTCGATGTGCTGCCTTTGATGCCTGGGTGAGTTGACTGGCAGCTATA  
AACCTAACCCCAAATCTATGTCAAGCTCATCGAGGAGTGCACCGACCTGCAGAAAGAGGGCGAGTTCTC  
CACCTGCTTACAGAACTACAGAGAGACTTCTGAAGCAGCGCCCAAGCTCAAGAGCTCATCCGC  
CTAGTCAAGCACTGGTACCAAAATTGTAAGAAGAAGCTTGGGAAGCTGCCACCTCAGTATGCCCTGGAGC  
TCCTGACGGTCTATGCTTGGGAGCGAGGGAGCATGAAAACACATTTCAACACAGCCCAAGGATTTCCGC  
GGTCTTGAATTAGTCATAAACTACCAGCAACTCTGCATCTACTGGACAAAGTATTATGACTTTAAAAAC  
CCCATTATGAAAAGTACCTGAGAAGGCAGCTCACGAAACCCAGGCTGTGATCTGGACCCGGCGGACC  
CTACAGGAAACTTGGGTGGTGGAGACCCAAAGGTTGGAGGCAGCTGGCAAGAGGCTGAGGCCTGGCT  
GAATTACCATGCTTTAAGAATTGGGATGGGTCCCCAGTGAAGTCTGCTGGATTCTGCTGGTGAAGCAAC  
AGTACAGACGATGAGACCGACGATCCCAGGACGTATCAGAAATATGGTTACATTGGAACACATGAGTACC  
CTCATTCTCTCATAGACCCAGCAGCTCCAGGCAGCATCCACCCACAGGCAGAAGAGGACTGGACCTG  
CACCATCTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG213055 representing NM\_016816  
 Red=Cloning site Green=Tags(s)

MMDLRNTPAKSLDKFIEDYLLPDTCFRMQIDHAIDIICGFLKERCFRGSSYPVCVSKVVKGGSSGKGTTL  
 RGRSDADLVVFLSPLTTFQDQLNRRGEFIQEIRRQLEACQRERALSVKFEVQAPRWGNPRALSFVLSLQ  
 LGEGVEFDVLPAFDALGQLTGSYKPNPQIYVKLIEECTDLQKEGEFSTCFTELQRDFLKQRPTKLSLIR  
 LVKHWYQNCKKKLGLKLPQYALELLTVYAWERGSMTKHFNTAQGFRTVLELVINYQLCIYWTKYDFKN  
 PIIKYLRRQLTKPRPVILDPADPTGNLGGDPKGWRQLAQEAEWLNYPCKNWDGSPVSSWILLAESN  
 STDDETDDPRTYQKYGYIGTHEYPHFSHRPSTLQAASTPQAEEDWTCTIL

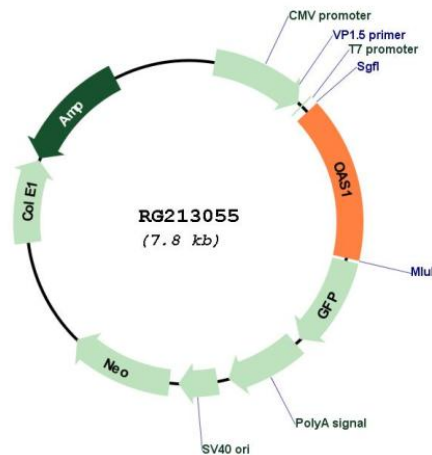
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_016816

<b>ORF Size:</b>	1200 bp
<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<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_016816.1</a> , <a href="#">NP_058132.1</a>
<b>RefSeq Size:</b>	1590 bp
<b>RefSeq ORF:</b>	1203 bp
<b>Locus ID:</b>	4938
<b>UniProt ID:</b>	<a href="#">P00973</a>
<b>Cytogenetics:</b>	12q24.13
<b>Protein Families:</b>	Druggable Genome

**Gene Summary:**

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]