

## Product datasheet for RC224706

### OAS1 (NM\_001032409) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	OAS1 (NM_001032409) 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:	>RC224706 representing NM_001032409 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATGGATCTCAGAAATACCCAGCCAAATCTCTGGACAAGTTCATTGAAGACTATCTCTTGCCAGACA  
CGTGTTCGCGATGCAAATCAACCATGCCATTGACATCATCTGTGGTTCCTGAAGGAAAGGTGCTTCCG  
AGGTAGCTCTACCTGTGTGTGTCCAAGGTGGTAAAGGGTGGCTCCTCAGGCAAGGGCACCACCCTC  
AGAGCCGATCTGACGCTGACCTGGTTGTCTTCTCAGTCCTCTCACCACCTTTTCAGGATCAGTTAAATC  
GCCGGGAGAGTTCATCCAGGAAATTAGGAGACAGCTGGAAGCCTGTCAAAGAGAGAGAGCATTTTCCGT  
GAAGTTTGAGGTCCAGGCTCCACGCTGGGCAACCCCGTGCCTCAGCTTCGTAAGTTCGCTCCAG  
CTCGGGGAGGGGTGGAGTTCGATGTGCTGCCTTTGATGCCTGGGTGAGTTGACTGGCGGTATA  
AACCTAACCCCAATCTATGTCAAGCTCATCGAGGAGTGCACCGACCTGCAGAAAGAGGGCGAGTTCTC  
CACCTGCTTACAGAACTACAGAGAGACTTCTGAAGCAGCGCCCAAGCTCAAGAGCTCATCCGC  
CTAGTCAAGCACTGGTACCAAAATTGTAAGAAGAAGCTTGGGAAGCTGCCACCTCAGTATGCCCTGGAGC  
TCCTGACGGTCTATGCTTGGGAGCGAGGGAGCATGAAAACACATTTCAACACAGCCAGGGATTTCCGGAC  
GGTCTTGAATTAGTCATAAACTACCAGCAACTCTGCATCTACTGGACAAAGTATTATGACTTTAAAAAC  
CCCATTATTGAAAAGTACCTGAGAAGGCAGCTCACGAAACCCAGGCTGTGATCCTGGACCCGGCGGACC  
CTACAGGAACTTGGGTGGTGGAGACCCAAAGGGTTGGAGGCAGCTGGCAAGAGGCTGAGGCCTGGCT  
GAATTACCATGCTTTAAGAATTGGGATGGGTCCCCAGTGAAGTCTGCTGACCCAGCACACT  
CCAGGCAGCATCCACCCACAGGCAGAAGAGGACTGGACCTGCACCATCCTCTGAATGCCAGTGCATCTT  
GGGGAAAGGGCTCCAGTGTATCTGGACCAGTTCCTTCAATTTTCAGGTGGGACTCTTGATCCAGAGAGG  
ACAAAGCTCCTCAGTGAAGTGTATAATCCAGGACAGAACCCAGGTCTCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC224706 representing NM\_001032409  
Red=Cloning site Green=Tags(s)

MMDLRNTPAKSLDKFIEDYLLPDTCFRMQINHAIDIICGFLKERCFRGSSYPVCSKVVKGGSSGKGTTL  
 RGRSDADLVVFLSPLTTFQDQLNRRGEF IQEIRRQLEACQRERAF SVKFEVQAPRWGNPRALS FVLSLQ  
 LGEGVEFDVLP AFDALGQLTGGYKPNPQIYVKL IEECTDLQKEGEFSTCF TELQRDFLKQRPTKLKSLIR  
 LVKHWYQNCCKKLGKLPQYALELLTVYAWERGS MKTHFNTAQGFRTVLELVINYQQLCIYWTKYYDFKN  
 PIIEKYLRRLTKPRPVILDPADPTGNLGGGDPKGWRQLAQEAEAWLNYPCKFNWDGSPVSSWILLTQHT  
 PCSIHPTGRRGLDLHHP LNASASWGKGLQCYLDQFLHFQVGLLIQRGQSSSVSWCIIQDRQTQVS

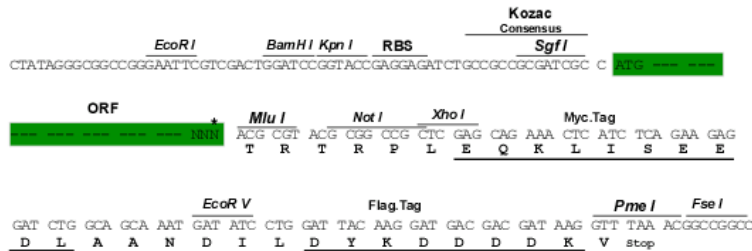
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8058\\_b10.zip](https://cdn.origene.com/chromatograms/mk8058_b10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001032409

**ORF Size:** 1242 bp

**OTI Disclaimer:** 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](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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\\_001032409.3](#)

**RefSeq Size:** 1575 bp

**RefSeq ORF:** 1245 bp

**Locus ID:** 4938

**UniProt ID:** [P00973](#)

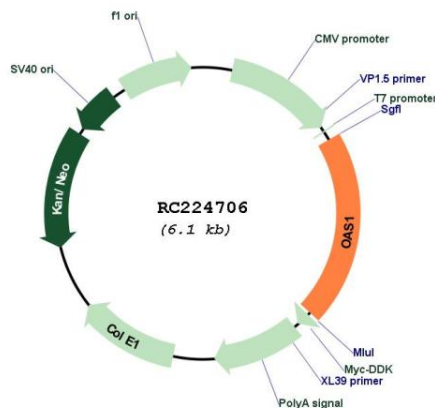
**Cytogenetics:** 12q24.13

**Protein Families:** Druggable Genome

**MW:** 47.2 kDa

**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]

### Product images:



Circular map for RC224706