

Product datasheet for **RC223226**

OAS2 (NM_001032731) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: OAS2 (NM_001032731) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: OAS2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC223226 representing NM_001032731
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGAAATGGGGAGTCCCAGCTGTCCTCGGTGCCTGCTCAGAAGCTGGGTTGGTTTATCCAGGAATACC
TGAAGCCCTACGAAGAATGTCAGACACTGATCGACGAGATGGTGAACACCATCTGTGACGTCCTGCAGGA
ACCCGAACAGTCCCCCTGGTGCAGGGAGTGGCCATAGGTGGCTCCTATGGACGGAAAACAGTCTTAAGA
GGCAACTCCGATGGTACCCTTGTCTCTTTCAGTGACTTAAACAATTCCAGGATCAGAAGAGAAAGCC
AACGTGACATCCTCGATAAAACTGGGGATAAGCTGAAGTCTGTCTGTTACGAAGTGGTTGAAAAACAA
TTTCGAGATCCAGAAGTCCCTTGATGGGTTACCATCCAGGTGTTCAAAAAAATCAGAGAATCTCTTTC
GAGGTGCTGGCCGCTTCAACGCTCTGAGTAAGCATTGCTGGGTGTCAGGAGAGAAAAGCCAAAGAAGCG
GGTGCCAGACAGCTCTGTGCAACCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC223226 representing NM_001032731
Red=Cloning site Green=Tags(s)
MNGESQLSSVPAQKLGWFIQEYLKPYEECQTLIDEMVNTICDVLQEPEQFPLVQGVAIIGGSYGRKTVLR
GNSDGLVLFSDLKQFQDQKRSQRDILDKTGDKLKFCLFTKWLKNNFEIQKSLDGFTIQVFTKNQRISF
EVLAAFNALSKHCWVSGEKSQRSGCQTALCNL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



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Cloning Scheme:

ACCN: NM_001032731

ORF Size: 516 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](#)

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_001032731.2](#)

RefSeq Size: 2123 bp

RefSeq ORF: 519 bp

Locus ID: 4939

UniProt ID: [P29728](#)

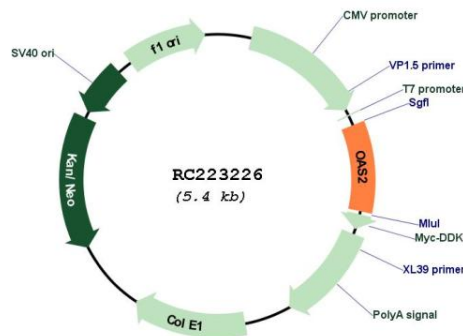
Cytogenetics: 12q24.13

Protein Families: Druggable Genome

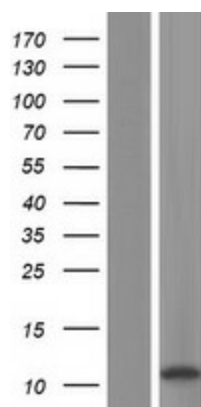
MW: 20 kDa

Gene Summary: This gene encodes a member of the 2-5A synthetase family, essential proteins involved in the innate immune response to viral infection. The encoded protein is induced by interferons and uses adenosine triphosphate in 2'-specific nucleotidyl transfer reactions to synthesize 2',5'-oligoadenylates (2-5As). These molecules activate latent RNase L, which results in viral RNA degradation and the inhibition of viral replication. The three known members of this gene family are located in a cluster on chromosome 12. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC223226



Western blot validation of overexpression lysate (Cat# [LY422333]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223226 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).