

Product datasheet for **MG221387**

Oas3 (NM_145226) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Oas3 (NM_145226) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Oas3
Synonyms:	Oas110
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG221387 representing NM_145226 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

ATGGACCTGTTCCACACGCCAGCCGGAGCTCTGGATAAGCTGGTGGCCACAACCTGCACCCAGCCCCTG
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TGAGTTTTCTCAGTCAAAGGCGTCCAGGATCTTACAGTTTCGTCTGGCATCGGCAGACGGAGAACACTGG
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ACGTGTACTCCTCCCTCCTTAGCAGCCACTGCCAGGCCGGGAGTACTCAGCCTGCTTCACTGAGCCCCG
AAAGAACTTTGTGAACACTCGCCCAGCCAAGCTTAAGAACCTAATCCTGCTGGTCAAACACTGGTACCAC
CAGGTGCAGACACGGGCCGTGAGGGCCACACTGCCCCAGCTACGCCCTAGAGCTGCTTACCATCTTTG
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GACGCCATCTTGTGCTGCCTCCGGGAGAAGAGTGTATACAAAGTCTTGAGGGTCAGCAAGGGCGGCTCTT
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG221387 representing NM_145226
 Red=Cloning site Green=Tags(s)

MDLFHTPAGALDKLVAHNLHPAPEFTAAVRGALGSLNITLQQHRARGSQRPVIRIAKGGAYARGTALRG
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 QVQTRAVRATLPPSYALELLTIFAWEQGCGKDSFSLAQGLRVLALIQHISKYLCIFWTENYGFEDPAVGE
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 DA ILCCLREKSVYKVLVRSKGGSFGRGTDLRGSCDVELVIFYKTLGDFKGQKPHQAEILRDMQAQLRHWC
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 SLAEGRLTILRLIQHQSLCIYWTVNYSVQDPAIRAHLLCQLRKARPLVLDPADPTWNVGQGDWLLAQE
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 LQRDFITSRPTKLKSLIRLVKYWYQQCNKTIKKGSLPPQHGLELLTVYAWEQGQNPQFNMAEGFRTVL
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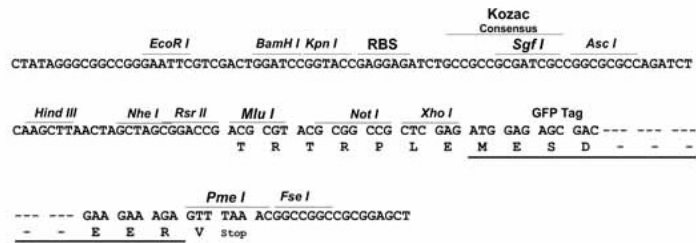
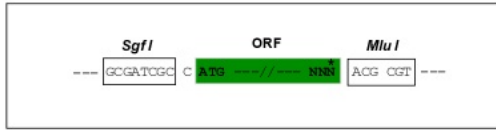
TRTRPLE – GFP Tag – V

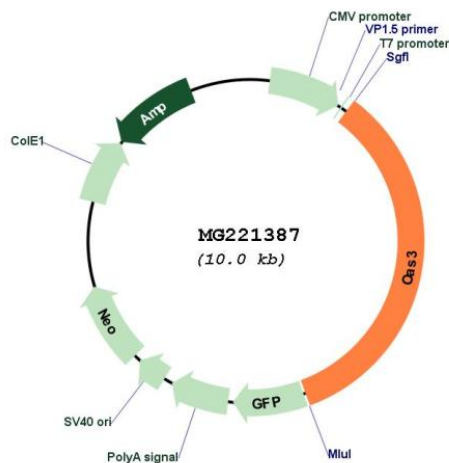
Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_145226

ORF Size: 3414 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_145226.2](#), [NP_660261.1](#)

RefSeq Size: 4718 bp

RefSeq ORF: 3417 bp

Locus ID: 246727

UniProt ID: [Q8VI93](#)

Cytogenetics: 5 60.64 cM

Gene Summary:

Interferon-induced, dsRNA-activated antiviral enzyme which plays a critical role in cellular innate antiviral response. In addition, it may also play a role in other cellular processes such as apoptosis, cell growth, differentiation and gene regulation. Synthesizes preferentially dimers of 2'-5'-oligoadenylates (2-5A) from ATP which then bind to the inactive monomeric form of ribonuclease L (RNase L) leading to its dimerization and subsequent activation. Activation of RNase L leads to degradation of cellular as well as viral RNA, resulting in the inhibition of protein synthesis, thus terminating viral replication. Can mediate the antiviral effect via the classical RNase L-dependent pathway or an alternative antiviral pathway independent of RNase L.[UniProtKB/Swiss-Prot Function]