

## Product datasheet for **RN204624**

### Oas3 (NM\_001009493) Rat Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Oas3 (NM_001009493) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Oas3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>RN204624 representing NM_001009493 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACCTGTACCACACGCCAGCCGGAGCTCTGGACAAGCTGGTGGCCACAGCCTGCACCCAGCCCCTG  
AGTTCACAGCGGCTGTGCGGCGTCTGGGGTCCCTGGACAACGTCCTAAGGAAGAACGGAGCCGGAGG  
GTTACAGAGACCAAGGGTGATAAGGATCATCAAGGAGGAGCCCATGCTCGAGGCACAGCTCTCAGAGGT  
GGCACTGATGTCGAACTCGTCATCTTCCTCGACTGCCTCCGGAGCTTTGGCGACCAGAAGACCTGTCCACA  
CAGAGATCTGGGCGCCATACAAGCATTGGAGTCTGGGGTGAACCCCTGGGCTGGCCTGACTTT  
TGAGTTTTCTGGGCCAAAGGCGTCTGGCATCTTACAGTTTCGCCTGGCATCGGTGGACCAAGAAAACCTGG  
ATAGATGTTAGCCTGGTGCCTTCGATGCCCTAGGACAGCTCCACTCTGAAGTCAAGCCAACACCCA  
ATGTGTAATCCTCCCTCCTCAGCAGCCACTGCCAGGCTGGGAACACTCAGCCTGCTTACAGAGCTCCG  
GAAGAATTTGTGAATATCCGCCAGTCAAACCTTAAGAATTAATCCTGCTGGTCAAACACTGGTACCGC  
CAGGTGCAGACACAGGTTGTGAGAGCCACTGCCCCCTAGCTACGCGCTGGAGCTGCTCACCATCTTTG  
CCTGGGAGCAGGGCTGTAGGAAGGATGCCTTCAGCCTGGCCAAAGGCTCCGGACTGTCTGGCCTTGAT  
CCAACGCAACAAGCATCTCTGCATTTCTGGACGGAAAACCTACGGCTTCAAGACCCTGCAGTTGGGGAG  
TTCTTGCAAGGCAGCTTAAGAGACCCAGGCCGTGATCTGGATCCAGCTGACCAACATGGGACTTGG  
GCAATGGGACAGCCTGGTGTGGATGTCTTGCCAAGGAGGCTGAATACAGCTTTAACCAGCAGTCTT  
CAAGGAGGCCCTCAGGAGCCCTTGTGCAACCTTGGGAGGGGCCGGCCTTCCATGTGCTGGATCTTGGAT  
TTGGGTACCCTATCCAACAAGGAGCTAAGCATGCCCTTGAAGACAACAATGGCCACCTTGTGTTACAGC  
CAATGAAAGAGAGCCTACAACCTCAAATCCAGCCCGAGGACTCCAGAAAACAGCCACCAAGATCTCCGC  
TATGCCAGACCAACGGTCACTGAAACCCACAAGGCCTCAAAAATCAGTGCACCCAAAGACTGTGAGT  
GAAACAGTGGTGAATCCCTCAAGTCATGTTGGATCACCCAGAGTACAGCATCTCAAACACGCCTCCGG  
GCCACTTAGTATGTCCACCGCTGGGTACAGATGGGCCAGATCTGTACAGATCCCAAGCAAGGAGCT  
GGACTCTTCAATCCAGGACCACCTCAGGCCGAGTCCAGTCCAGCAGCAGGTGAGGCAGGCCATCGAC  
ACCATCTGTGCTGCCTCCGGGAGAAGTGTGAGACAAAAGTCTTGAGAGTCAAGGAGGCTGCTTTTGG  
GCCGTGGCACAGACCTCAGGGGCAAATGTGATGTGGAGCTTGTATCTTTATAAACTCTCGGGGACTT



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CAAGGGCCAGAACTCACACCAGACAGAGATCCTGTGTGACATGCAGGCCAGCTGCAGCGCTGGTGTGAC  
 AACCCAGCACCTGGACTGAGCCTCCAGTTTATTGAACAGAAGTCCAATGCTCTGCATCTTCAGCTGGTGC  
 CCACCAACCTCAGCAACCCGGGTAGACCTCAGTGTGCTGCCCGCTTTTGTGACAGTGGGGCCGCTGAAGTC  
 CGGCGCCAAACCTCTACCCGAGACGTAATCCTCCCTCCTCAGCAGCGGCTGCCAGGCTGGGGAGCATGCA  
 GCCTGCTTCGAGAGCTCCGAAGAACTTCATAAACTCGCCCTGCCAACTTAGGAGCCTGATGCTAC  
 TGGTCAAACACTGGTACCGCCAGGTTGCCGCTCGATTTGAAGGAGGAGACAGCAGGTTGCTGCTGCC  
 CCCAGCCTATGCCCTGGAGCTCCTGACAGTCTTTGCCCTGGGAACAAGGCTGCCGAGAACAAGTTTAGC  
 ATGGCTGAAGGCCTGCCGACTGTCTGAGGCTGGTCCAGCAGCACCAGTCACTCTGTATCTACTGGACAG  
 TCAACTACAGTGTGCAGGACCCAGCCATCAGAGCACACCTTCTCCGCAGCTTCGAAAGCCAGGCTCT  
 AATCCTAGACCCTGCAGATCCCACCTGGAACATGGACCAGGGCAACTGGAAGTTGCTGGCTCAGGAGGCG  
 GCTGCCCTGGAGTCACAAGTCTGCCTCAGAGTAGGATGGGAATCTGGTGCCACCATGGGATGTTATGC  
 CAGCCCTCCTCACCAGACCCCGGCTCAGAACCTGGACAAGTTTCTGTGAATTCCTCCAGCCTGACCG  
 CCATTTCTGACTCAGGTGAAGAGAGCAGTGGACACCATATGTTCTTCTGAAAGAAAAGTCTCCGG  
 AATTCTACCATCAAGGTGCTCAAGGTGGTCAAGGGTGGTCTTCTGCCAAAGGCACTGCTCTACAAGGGC  
 GCTCGGATGCTGACCTGGTGGTCTCCTCAGCTGCTTCCGCCAGTCTCTGAACAAGGCAGCCATCGGGC  
 AGAGATCATCGCGGAGATCCAGGCTCAGCTGGAGGCGTGCAGCAGAAGCAGAGGTTTCGATGTCAGTTT  
 GAGATCTCCAAGAGGAAGAACCCCGAGTTCTCAGCTTACGCTGACATCCAAGACGCTGCTAGGCCAGA  
 GCGTGGACTTCGATGTGCTGCCAGCCTTCGATGCTTTGGTCCAGTGAAGTCCGGCTCTCGGCCAGATCC  
 CCGGGTCTACACGGACCTCATCCAGAGCTACAGTAATGCAGGAGAGTTCTCTACCTGCTTACGGAGCTG  
 CAGCGGGACTTCATTAGCTCCCGTCCCACAACTCAAGAGTCTGATCCGTCTGGTGAACACTGGTACC  
 AACAGTGAACAAGACAGTCAAGGGGAAGGTTCTTCCCCCAGCACGGGCTGGAGCTCCTGACTGT  
 GTACGCTGGGAGCGAGGCAGCCAGAACCCCAAGTCAACATGGCGGAGGGCTCCGCACAGTTCTGGAG  
 CTGATTGGCCAGTACCGTCACTGTGCGTCTATTGGACCATCAACTACGGTGCAGAAGACGAGACCATCG  
 GAGACTTCTGAAGATGCAGCTTCAGAAGCCAGGCCTGTCATCTGGACCCAGCTGACCCGACAGGCCAA  
 CCTAGGCCACAATGCCCGCTGGGACCTGCTTGCCAAGGAGGCTGCAGCATACACATCTGCCCTGTGCTGC  
 ATGGACAAGGACGGCAACCCCATCAAGCCATGGCCAGTAAAGGCCGCTGTGTA

ACGGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** Sgfl-Mlul
- ACCN:** NM\_001009493
- Insert Size:** 3414 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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\\_001009493.1](#), [NP\\_001009493.1](#)

RefSeq Size: 4015 bp

RefSeq ORF: 3414 bp

Locus ID: 494202

UniProt ID: [Q5MYT7](#)

Cytogenetics: 12q16

**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 (By similarity).[UniProtKB/Swiss-Prot Function]