

## Product datasheet for MC223723

### Oas3 (NM\_145226) Mouse Untagged Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: Oas3 (NM\_145226) Mouse Untagged Clone  
 Tag: Tag Free  
 Symbol: Oas3  
 Synonyms: Oasl10  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 Cell Selection: Neomycin  
 Fully Sequenced ORF: >MC223723 representing NM\_145226  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGACCTGTTCCACACGCCAGCCGGAGCTCTGGATAAGCTGGTGGCCACAACCTGCACCCAGCCCCTG  
 AGTTCACAGCAGCCGTACGGGTGCTCTGGGGTCGCTAAACATCACCTACAGCAGCACAGAGCCCGAGG  
 GTCACAGAGACCAAGAGTGATAAGGATTGCCAAGGGAGGAGCCTATGCCCGGGGCACAGCTCTCAGAGGT  
 GGCACCGATGTCGAACTGTCATCTTCCCTGACTGCTTCCAGAGCTTTGGTGACCAAGACCTGTCACT  
 CAGAGACCTGGGTGCCATGCGAATGTTGCTGGAGTCTGGGGGGCCACCCCGGGCCTGGCCTGACTTT  
 TGAGTTTTCTCAGTCAAAGGCGTCCAGGATCTTACAGTTTCGCTCTGGCATCGGCAGACGGAGAACACTGG  
 ATAGATGTTAGCCTGGTGCCTTTGATGTCCTAGGACAGCCCGCTCTGGAGTCAAGCCGACACCCA  
 ACGTGTACTCCTCCCTCCTTAGCAGCCACTGCCAGGCCGGGAGTACTCAGCCTGCTTCACTGAGCCCCG  
 AAAGAATTTGTGAACACTCGCCAGCCAAGCTTAAGAATTAATCCTGCTGGTCAAACACTGGTACCAC  
 CAGGTGCAGACACGGGCCGTGAGGGCCACTGCCCCCCAGCTACGCCCTAGAGCTGCTTACCATCTTTG  
 CCTGGGAGCAGGGCTGTGGGAAGGACAGCTTCCAGCCTGGCCCAAGGGCTCCGGACCGTCTGGCCTTGAT  
 CCAACACAGCAAGTACCTCTGCATTTCTGGACGAAAACCTATGGCTTCGAGGACCTGCAGTTGGAGAG  
 TTCTTGCGAAGGCAGCTTAAGAGACCCAGGCCCGTGCATCCTGGATCCAGCTGATCCAACGTGGGACGTGG  
 GCAACGGGACAGCCTGGCGCTGGGATGTGCTGGCCAGGAGGCTGAGTCCAGCTTTAGCCAGCAGTGCTT  
 CAAGCAGGCCTCAGGAGTCTTGTGCAGCCTTGGGAGGGGCCGGGCTGCCACGGGCTGGGATCTTGGAT  
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 CAAAGGAAAGGAGCCAAAACCTTCCAATTCAGCTCCAGGATTTCCAGAAGCAGCCACCAAGATCCCTGC  
 TATGCCCAACCAAGTGCCAATAAAACCCGCAAGATCCGCAAGAAAGCAGCTCACCCAAAGACTGTCCAG  
 GAAGCAGCATTGGATAGTATCTCAAGTCATGTTCCGGATCACCCAGAGCACAGCATCCTCACACATGCCTC  
 CTGACCGCTCTAGCATCTCCACCGCTGGGTACCGATGAGCCAGATCTGTACAGATCCCAGCAAGGA  
 TCTAGACTGCTTCATCCAGGACCACCTTAGGCCGAGTCCCAGTTCCAGCAGCAGGTGAAGCAGGCCATC  
 GACGCCATCTTGTGCTGCCTCCGGGAGAAGAGTGTATACAAAGTCTTGGGGTCAGCAAGGGCGGCTCTT



TCGGCCGTGGCAGACCTCAGGGGCAGCTGCGATGTGGAACCTGTTCATCTTTATAAAAACCCCTCGGGGA  
 CTTCAAGGGCCAGAAGCCTCACCAGGCAGAGATCCTGCGTGACATGCAGGCCAGCTACGACACTGGTGT  
 CAGAACCCCGTGCCTGGACTGAGCCTCCAGTTTATTGAACAGAAGCCCAACGCTCTGCAACTCCAGCTGG  
 CGTCCACCGACCTCAGCAACCGGGTGGACCTCAGTGTGCTGCCTGCTTTTGATGCTGTGGGGCCGCTGAA  
 GTCGGCACCAAACTCAGCCCCAGGTGTACTCCTCGCTCCTCAGCAGCGGCTGCCAGGCTGGGGAGCAC  
 GCAGCTGCTTCGAGAGCTTCGAAGGAACCTCATAAACTTGCCTCCCAAACCTTAAGAGCCTGATGC  
 TACTGGTCAAACACTGGTACCGCCAGTTGTCACTCGATATAAAGGAGGAGAGGGCAGGTGATGCTCC  
 GCCCCAGCCTACGCCCTGGAGCTCCTGACCATCTTTGCCTGGGAACAAGGCTGTGGAGAGCAAAAGTTC  
 AGCCTGGCTGAAGGCCTGCGGACCATCCTGAGGCTGATCCAACAGCACCAGTCGCTTTGTATCTACTGGA  
 CGGTCAACTACAGTGTGCAGGACCCGGCCATCAGAGCACATCTTCTGCCAGCTTCGGAAGCCAGGCC  
 TCTAGTCTGGACCCTGCAGATCCCACCTGGAACGTGGGCCAGGGCGACTGGAAGCTATTAGCTCAGGAG  
 GCAGCTGCCCTTGGGTACAAGTCTGCCTCAGAGTGGGGATGGGACTCTGGTCCACCCTGGGATGTGA  
 CGCCAGCCCTCCTCACCAGACCCTAGCTGAGGACCTGGACAAATTCATCAGTGAATTCCTCCAGCCAA  
 CCGCCACTTCTGACTCAAGTGAAGAGAGCCGTGGACACCATATGTTCTTCTGAAAGAAAAGTCTTC  
 CGGAACCTACCATCAAGGTGCTCAAGGTGGTCAAGGTGGTCTTCTGCAAAGGCACGGCTCTACAAG  
 GACGCTCAGATGCCGACCTGGTGGTGTTCCTCAGCTGCTCCGCCAGTCTCTGAGCAAGGCAGCCATCG  
 GGCAGAGATCATCTCGGAGATCCAGGCTCATCTGGAGGCGTGTGACGAGATGCACAGCTTCGATGTCAAG  
 TTTGAGGTCTCCAAGAGGAAGAACCCCGAGTGTCTCAGCTTACGCTGACATCCCAGACGCTGTGGACC  
 AAAGCGTGGACTTTGACGTCTGCCAGCCTTTGATGCTCTCGGCCAGCTGAGGTCCGGCTCTCGGCTGA  
 TCCCGGGTCTACACAGACCTCATCCACAGCTGCAGTAATGCAGGAGAGTTCTCTACCTGCTTACAGAG  
 CTGCAGAGGGACTTCATTACCTCCCGTCCCACCAAACCTCAAGAGCCTGATCCGGCTGGTGAATACTGGT  
 ACCAACAGTGTAAACAAGACCATCAAGGGGAAGGGTTCTTGCCTCCCAAGCAGCGGGCTGGAGCTCCTAAC  
 TGTGTACGCTGGGAGCAAGGTGGCCAGAATCCCAGTTCAACATGGCGGAGGGCTTCCGCACTGTTCTG  
 GAGCTGATTGTCCAGTACCGGCAGCTCTGCGTCTATTGGACCATCAACTACAGCGCAGAAGACAAGACCA  
 TCGGTGACTTCTGAAGATGCAGCTTCGGAAGCCAGGCCTGTATCCTGGACCCAGCTGACCCGACAGG  
 CAACCTGGGCCACAACGCTCGTGGGATCTGCTTGCCAAGGAGGCTACCGTGTACGCATCTGCCCTGTGC  
 TCGTGGACAGGGATGGCAATCCCATCAAGCCATGGCCGGTAAAGGCCGCTGTGTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_145226
- Insert Size:** 3417 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\\_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]