

Product datasheet for **RR200806**

Nos3 (NM_021838) Rat Tagged ORF Clone

Product data:

| | |
|--------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Nos3 (NM_021838) Rat Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Nos3 |
| Synonyms: | eNos |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Cell Selection: | Neomycin |
| ORF Nucleotide Sequence: | >RR200806 representing NM_021838 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGGGCAACTGAAGAGTGTGGGCCAGGAGCCTGGGCCACCCTGTGGCCTAGGGCTCGGGCTGGGCCTAG
GGCTATGCGGCAAGCAGGGCCCAGCCTCACCGGCACCAGAGCCTAGCCAGGCACCAGTACCCCGTCCCC
AACCCGACCAGCACCAGACCACAGCCCCCGTTAACCCGCCCCCAGACGGACCAAGTTTCTCGAGTA
AAGAACTGGGAAGTGGGCAGCATCACCTACGATACCCTCAGTGCACAGGCTCAGCAGGATGGGCCCTGTA
CCCAAGACGCTGCTTGGGATCCCTGGTATTTCCAAGGAAGTTACAGAGCCGGCCACCCAGGGCCCTTC
ACCCACTGAGCAGCTATTGGGTCAAGCCCGGGACTTCAATCAGTACTATAACTCGATCAAAAGGAGT
GGTTCCAGGCTCATGAGCAGCGGCTTCAGGAAGTGGAAGCTGAGGTGGTGGCCACGGGCACCTACCAGC
TCCGGGAGAGTGAGCTGGTGTGGGGCCAAACAGGCCTGGCGCAACGCTCCCGCTGTGTGGGGCGGAT
CCAGTGGGGAAACTGCAGGTAATTTGATGCTCGGGACTGCAGGACAGCACAGGAAATGTTACCTACATC
TGTAACCACATTAAGTATGCAACAAACCGAGGCAATCTTCGTTACGCCATCACGGTGTCCCCAGCGCT
ACGCTGGCCGGGAGACTTCCGGATCTGGAACAGCCAGCTGGTGCCTACGCGGGCTATAGGCAGCAGGA
CGGCTCTGTGCGAGGGGACCCTGCCAACGTGGAGATCACTGAGCTGTATTCAACATGGCTGGACCCCA
GGAAATGGCCGCTTTGATGTGCTGCCCTGCTACTCCAGGCTCCCGATGAGCCCCAGAACTCTTCACTC
TGCCCCCAGAGCTGGTCCTCGAGGTGCCTCTGGAGCACCCACGCTAGAGTGGTTTGTGCCCTTGCCCT
GCGCTGGTATGCCCTCCAGCTGTGTCCAATATGCTGCTAGAAATCGGGGCTGGAGTTTCCGGCTGCC
CCTTTCAGCGGCTGGTACATGAGTTCAGAGATTGGCATGAGGGACCTGTGTGACCCTCACCGATACAACA
TACTTGAGGATGTGGCTGTCTGCATGGATCTAGACACCCGGACAACCTCATCACTGTGAAAGACAAGGC
AGCAGTGGAAATTAACGTGGCTGTGCTGTACAGTTACCAGCTGGCCAAAGTGACCATTGTGGACCACCAT
GCCGCCACAGCCTCCTTCATGAAGCACTTGAAAATGAGCAGAAGGCCAGAGGGGCTGCCCGCTGACT
GGCCTGGATCGTCCCCCATCTCAGGAGCCTCACCCCTGTCTTCCATCAAGAGATGGTCAACTATTT
CCTGTCCCTGCCTTCCGCTACCAGCCTGACCCCTGAAAAGGAAGTGCAGCAAAAGGCACAGGCATCACC
AGGAAGAAGACTTTAAGGAAGTAGCCAATGCAGTGAAGATCTCTGCCTCACTCATGGGCACGGTATGG



View online »

CGAAGCGTGTGAAGGCGACTATCCTGTATGGCTCTGAGACTGGCCGCGCCAGAGCTACGCACAGCAGCT
GGGGAGGCTCTTTTCGGAAGGCGTTTGACCCCGGGTCTGTGCATGGATGAATACGATGTGGTATCCCTA
GAGCATGAGGCCTTGGTATTGGTGGTGACCAGCACATTTGGCAATGGGGATCCCCGGAGAATGGAGAGA
GCTTTGCAGCAGCGCTGATGAAATGTCGGGCCCTACAACAGCTCCCTCGGCCTGAGCAGCACAAGAG
TTACAAAATCCGATTCAACAGTGTCTCTGCTCGGACCCACTGGTATCCTCTTGGCGGCGAAAAGGAAG
GAATCCAGTAACACAGACAGTGCAGGGGCCCTGGGACCCTCAGGTTCTGTGTGTTTGGCTGGGCTCCA
GAGCATACCCGCACTTCTGTGCCTTTGCTCGAGCGTGGACACAAGGCTGGAGGAGCTGGCGGGGAGCG
ACTGTTGCAGCTGGGCCAGGGTATGAGCTCTGCGGCCAGGAGGAGGCTTCCGAGGCTGGGCCAGGCA
GCCTTCCAGGCTGCCTGTGAAACTTTCTGTGTGGGAGAAGATGCCAAGGCTGCTGCCGAGATATCTTCA
GTCCCAAGCGCAGCTGGAACGCGCAGAGGTACCGGCTGAGTACCCAAGCTGAGAGCCTGCAATTACTGCC
AGGGCTGACTCACGTGCACAGACGGAAGATGTTCCAGGCTACAATTCTTTCTGTGGAGAACCTACAGAGC
AGCAAATCCACCCGAGCCACAATCCTGGTGCCTGACTGGAAGCCAGGAGGGACTGCAGTACCAGC
CAGGGGACCACATAGGTGTGTGCCACCAACCGGCTGGCTAGTGGAGGCGCTGCTGAGCCGAGTGGA
GGACCCTCGCCATCCACAGAGCCTGTGGCCGTGGAACAAGTGGAAAAAGGCAGCCCTGGTGGCCCTCC
CCCGGCTGGGTACGGGACCCCGGCTTCCCCATGTACGCTGCGCCAGGCTCTCACTTACTTCTCTGGACA
TCACTTCCCCGCGCAGCCCTCGCCTTCTCGACTGCTGAGCACCTGGCAGAGGAGTCCAGCGAACAGCA
GGAGCTAGAGGCTCTTAGCCAGGACCCCGGCGCTACGAAGAATGGAAGTGGTTCGCTGCCACACTG
CTAGAGGTGCTGGAACAATTTCCATCCGTGGCACTGCCTGCCCGCTGATCCTCACCCAGCTGCCCTGC
TCCAGCCCGGTACTACTCTGTCTGAGTCTCAGCACCCAGCGCCACCCAGGAGAGATCCACCTCACTGTAGC
TGTGCTGGCATAACAGAACCCAGGATGTGCTGGGCCCTCTGCACTATGGGGTCTGTTCCACATGGATGAGC
CAACTCAAGGCAGGAGACCCGGTGCCTGCTTTCATCAGGGGGCTCCCTCCTTCCGGTGCCACCTGATC
CTAACTTGCCTTGCATCCTGGTGGGCCAGGACTGGTATTGCACCCTTCCGGGGATTCTGGCAAGACCG
ATTACACGACATTGAGATCAAAGGACTGCAGCCTGCCCCATGACTTTGGTGTGGCTGCCGATGCTCC
CAACTGGACCATCTCTACCGGGACGAGGTACTGGACGCCAGCAGCGTGGAGTGTGGACAAGTCCCTCA
CCGCTTTTCCAGGGATCCTGGCAGCCCTAAGACCTATGTGCAAGACCTCCTGAGGACAGAGCTGGCCG
GGAGGTTACCCGCGTGTGTGCCTCGAGCAAGGACACATGTTTGTCTGCGGTGATGCTCACTATGGCAACC
AGCGTCTGCAAACCGTGCAGCGAATTCTGGCAACAGAGGGCAGCATGGAGCTGGATGAAGCCGGTGAAG
TCATCGGCGTGTGCGGGATCAGCAACGCTACCACGAGGACATTTTCGGACTCACATTGCGCACCCAGGA
GGTGACGAGCCGATCCGCACCCAGAGTTTTTCTTTCAGGAGCGACAGCTGAGGGTGCAGTGCCTGG
TCCTTTGACCCGCTACCAAGAAACACCTGGTTCC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR200806 representing NM_021838
 Red=Cloning site Green=Tags(s)

MGNLKSVMGQEPGPPCGLGLGLGLGLCGKQGPASPAPEPSQAPVPPSPTRPAPDHSPLTRPPDGPKFPRV
 KNWEVGSITYDTLSAQAAQDGPCTPRRCLGSLVFPRKLQSRPTQGPSPTQLLQQARDFINQYNSIKRS
 GSQAHEQRLQEVEAEVATGTYQLRESELVFGAKQAWRNAPRCVGRIQWGKLVQVFDARDCRTAQEMFTYI
 CNHIKYATNRGNLRSAITVFPQRYAGRDFRIWNSQLVRYAGYRQDGSVRGDPANVEITELCIQHGWT
 GNGRFDVLPDLLQAPDEPELFTLPPLELVLEVPLEHPTLEWFAALGLRWYALPAVSNMLLEIGGLEFPAA
 PFGSWYMSSEIGMRDLCDPHRYNILEDVAVCMDLDRTRTSSLWKDKAAVEINAVLVSQYLAQVTVVDH
 AATASFMKHLENEQKARGGCPADWAWIVPPISSGLTPVHFQEMVNYFLSPAFRYQDPWKGSAAKGTGIT
 RKKTFKEVANAVKISASLMGMTVMARVKATILYGSETGRAQSYAQLGRLFRKAFDPRVLCMDEYDVVSL
 EHEALVLVVTSTFGNDPPENGESFAAALMEMSGPYNSSPRPEQHKSYKIRFNSVSCSDPLVSSWRRKRK
 ESSNTDSAGALGTLRFVFLGSRAYPHFCAFARAVDTRLEELGGERLLQLGQDELCGQEEAFRGWAQA
 AFQAACETFCVGEDAKAAARDIFSPKRSWKRQRYRLSTQAESLQLLPGLTHVHRRKMFQATILSVENLQS
 SKSTRATILVRLDTGSQEGLYQPGDHIGVCPNRPGLVEALLSRVEDPPPSTEPVAVEQLEKGSPPGPP
 PGWVRDPRLPCTLRQALTYFLDITSPSPRLLRLLSTLAEESSEQQELEALSQDPRRYEWWKFRCP
 LEVLEQFPSVALPAPLILTQLPLLPQRYYSVSSAPSAHPGEIHLTVAVLAYRTQDVLGPHYGVCS
 TMSQLKAGDPVPCFIRGAPSFRLPPDPNLPCILVGPGTGIAPFRGFWDRLHDIEIKLQAPMTLVFGCRCS
 QLDHLRDEVLDAQQRGVFGQVLTAFSRDPGSPKTYVQDLLRTELAEEVHRVLCLEQGHMFCGQDVT
 MATSVLQTVQRILATEGSMELDEAGDVIGVLRDQQRHYHEDIFGLTLRTQEVTSRIRTSQSFSLQER
 QLRGAVPVSFDPPPTQETPGS

TRTRPLEQKLISEEDLAANDILDYKDDDDK

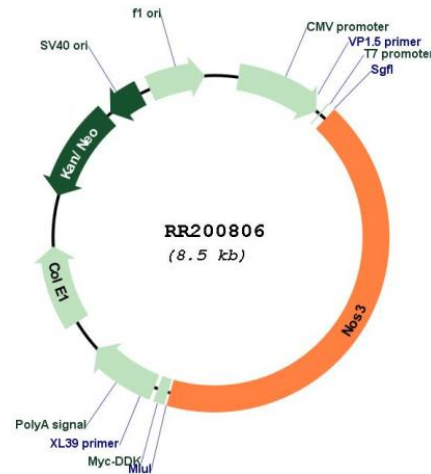
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_021838

ORF Size: 3606 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_021838.2](#), [NP_068610.1](#)
RefSeq Size: 3953 bp
RefSeq ORF: 3609 bp
Locus ID: 24600
UniProt ID: [Q62600](#)
Cytogenetics: 4q11
MW: 133.2 kDa
Gene Summary: enzyme that synthesizes Nitric oxide from L-arginine [RGD, Feb 2006]