

Product datasheet for RN200806

Nos3 (NM_021838) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nos3 (NM_021838) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Nos3
Synonyms:	eNos
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>RN200806 representing NM_021838 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCAACTTGAAGAGTGTGGGCCAGGAGCCTGGGCCACCCGTGGCCTAGGGCTCGGGCTGGGCCTAG
GGCTATGCGGCAAGCAGGGCCCAGCCTCACCGGCACCAGAGCCTAGCCAGGCACCAGTACCCCCGTCCCC
AACCCGACCAGCACCAGACCACGCCCCCGTTAACCCGGCCCCAGACGGACCAAGTTTCTCGAGTA
AAGAACTGGGAAGTGGGAGCATCACCTACGATACCCCTAGTGCACAGGCTCAGCAGGATGGGCCCTGTA
CCCCAAGACGCTGCTTGGGATCCCTGGTATTTCCAAGGAAGTTACAGAGCCGGCCACCCAGGGCCCTTC
ACCCACTGAGCAGCTATTGGGTCAAGCCCGGGACTTCATCAATCAGTACTATAACTCGATCAAAAGGAGT
GGTTCCAGGCTCATGAGCAGCGCTTCAGGAAGTGGAAGCTGAGGTGGTGGCCACGGGCACCTACCAGC
TCCGGGAGAGTGAGCTGGTGTGGGGCCAAACAGGCCTGGCGCAACGCTCCCCGCTGTGTGGGGCGGAT
CCAGTGGGGGAACTGCAGGATTTGATGCTCGGGACTGCAGGACAGCACAGGAAATGTTACCTACATC
TGTAACCACATTAAGTATGCAACAAACCGAGGCAATCTTCGTTACGCCATCACGGTGTCCCCCAGCGCT
ACGCTGGCCGGGAGACTTCCGGATCTGGAACAGCCAGCTGGTGCCTACGCGGGCTATAGGCAGCAGGA
CGGCTCTGTGCGAGGGGACCCCTGCCAACGTGGAGATCACTGAGCTCTGTATTCAACATGGCTGGACCCCA
GGAAATGGCCGCTTTGATGTGCTGCCCTGCTACTCCAGGCTCCCGATGAGCCCCAGAAGTCTTCACTC
TGCCCCCAGAGCTGGTCTCGAGGTGCCTCTGGAGCACCCACGCTAGAGTGGTTTGTGCCCTTGCCCT
GCGCTGGTATGCCCTCCAGCTGTGTCCAATATGCTGCTAGAAAATCGGGGCTGGAGTTTCCGGCTGCC
CCTTTCAGCGGCTGGTACATGAGTTCAGAGATTGGCATGAGGGACCTGTGTGACCCTCACCGATACAACA
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AGCAGTGGAAATTAACGTGGCTGTGCTGTACAGTTACCAGCTGGCCAAAGTGACCATTGTGGACCACCAT
GCCGCCACAGCCTCCTTCATGAAGCACTTGAAAATGAGCAGAAGGCCAGAGGGGGCTGCCCGCTGACT
GGGCTGGATCGTCCCCCATCTCAGGCAGCCTCACCCCTGTCTTCCATCAAGAGATGGTCAACTATTT
CCTGTCCCTGCCTCCGCTACCAGCCTGACCCCTGAAAAGGAAGTGCAGCAAAAGGCACAGGCATCACC



AGGAAGAAGACTTTTAAGGAAGTAGCCAATGCAGTGAAGATCTCTGCCTCACTCATGGGCACGGTGATGG
 CGAAGCGTGTGAAGGCGACTATCCTGTATGGCTCTGAGACTGGCCGCGCCAGAGCTACGCACAGCAGCT
 GGGGAGGCTCTTTTCGGAAGGCGTTTGACCCCGGGTCTGTGCATGGATGAATACGATGTGGTATCCCTA
 GAGCATGAGGCCCTTGGTATTGGTGGTGACCAGCACATTTGGCAATGGGGATCCCCGGAGAATGGAGAGA
 GCTTTGCAGCAGCGCTGATGAAATGTCGGGGCCCTACAACAGCTCCCTCGGCTGAGCAGCACAAGAG
 TTACAAAATCCGATTCAACAGTGTCTCTGCTCGGACCCACTGGTATCCTCTTGGCGCGCAAAAGGAAG
 GAATCCAGTAACACAGACAGTGCAGGGGCCCTGGGACCCCTCAGGTTCTGTGTGTTGGGCTGGGCTCCA
 GAGCATACCCGCACTTCTGTGCCTTTGCTCGAGCGGTGGACACAAGGCTGGAGGAGCTGGGCGGGAGCG
 ACTGTTGCAGCTGGGCCAGGGTGTGAGCTCTGCGGCCAGGAGGAGGCTTTCCGAGGCTGGGCCAGGCA
 GCCTTCCAGGCTGCCTGTGAAACTTTCTGTGTGGGAGAAGATGCCAAGGCTGCTGCCGAGATATCTTCA
 GTCCCAAGCGCAGCTGGAAACGCCAGAGGTACCGGCTGAGTACCCAAGCTGAGAGCCTGCAATTACTGCC
 AGGGCTGACTCACGTGCACAGACGGAAGATGTTCCAGGCTACAATTTCTTCTGTGGAGAACCTACAGAGC
 AGCAAATCCACCCGAGCCACAATCCTGGTGCCTGTTGACACTGGAAGCCAGGAGGGACTGCAGTACCAGC
 CAGGGGACCACATAGGTGTGTGCCACCAACCGGCTGGCCTAGTGGAGGCGTCTGAGCCGAGTGGAG
 GGACCCTCGCCATCCACAGAGCCTGTGGCCGTGGAACAAGTGGAAAAGGCAGCCCTGGTGGCCCTCCC
 CCGGCTGGGTACGGGACCCCGGCTTCCCCATGTACGCTGCGCCAGGCTCTCACTTACTTCTCTGGACA
 TCACTTCCCCGCCAGCCCTCGCCTTCTCGACTGCTGAGCACCCCTGGCAGAGGAGTCCAGCGAACAGCA
 GGAGCTAGAGGCTCTTAGCCAGGACCCCGGCGCTACGAAGAATGGAAGTGGTCCGCTGCCCCACTG
 CTAGAGGTGTGGAACAATTTCCATCCGTGGCACTGCCTGCCCGCTGATCCTCACCCAGCTGCCCTGC
 TCCAGCCCCGGTACTACTCTGTGAGTCAAGCAGCCAGCGCCACCCAGGAGAGATCCACCTCACTGTAGC
 TGTGCTGGCATAACAGAACCCAGGATGTGCTGGGCCCTCTGCACTATGGGGTCTGTTCCACATGGATGAGC
 CAACTCAAGGCAGGAGACCCGGTGCCTGCTTCAATCAGGGGGCTCCCTCCTTCCGGCTGCCACCTGATC
 CTAACTTGCCTTGCATCCTGGTGGGCCAGGGACTGGTATTGCACCCTTCCGGGATTGGCAAGACCG
 ATTACAGCATTGAGATCAAAGGACTGCAGCCTGCCCCATGACTTTGGTGTGGTGGCTGCCGATGCTCC
 CAACTGGACCATCTACCGGGACGAGGTACTGGACGCCAGCAGCGTGGAGTGTGGACAAGTCTCA
 CCGCCTTTTCCAGGGATCCTGGCAGCCCTAAGACCTATGTGCAAGACCTCCTGAGGACAGAGCTGGCCG
 GGAGGTTACCGCGTGTGTGCCTCGAGCAAGGACACATGTTTGTCTGCGGTGATGTCACTATGGCAACC
 AGCGTCTGCAAACCGTGCAGCGAATTCTGGCAACAGAGGGCAGCATGGAGCTGGATGAAGCCGGTGAAG
 TCATCGGCGTGTGCGGGATCAGCAACGCTACCACGAGGACATTTTCGGACTCACATTGCGACCCAGGA
 GGTGACGAGCCGATCCGCACCCAGAGTTTTTCTTTCAGGAGCGACAGCTGAGGGGTGCAGTGCCTGG
 TCCTTTGACCCGCTACCCAAGAAACACCTGGTCTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja1931_d10.zip

Restriction Sites: Sgfl-Mlul

ACCN: NM_021838

Insert Size: 3609 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](#)

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

Gene Summary: enzyme that synthesizes Nitric oxide from L-arginine [RGD, Feb 2006]