

Product datasheet for **MG211798**

Nos3 (BC052636) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nos3 (BC052636) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nos3
Synonyms:	eNOS, ecNOS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG211798 representing BC052636 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCAACTGAAGAGTGTGGGCCAGGAGCCTGGGCCACCCTGTGGCCTAGGGCTCGGGCTGGGTTT
GGCTGTGCGGCAAGCAGGGCCAGCCTCTCCAGCACCGGAGCCTAGCCAGGCGCCAGCACCCCGTCCCC
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AAGAATTGGGAAGTGGGAGCATCACCTACGACACCCTCAGTGCCAGGCTCAGCAGGATGGGCCCTGTA
CCTCAAGACGCTGCTTGGGATCCCTGGTGTTCGAAGGAAGTTACAGAGCCGGCCACCCAGGGCCCTTC
ACCCACTGAGCAGCTATTGGGTCAAGCCCGGACTTCATCAATCAGTACTATAACTCCATCAAAGGAGT
GGCTCCCAGGCTCATGAGCAGCGCTTCAGGAAGTGGAGGCTGAGGTGGCAGCCACAGGCACCTACCAGC
TCCGGGAGAGCGAGCTGGTGTGGGGCCAAGCAGGCCTGGCGCAATGCTCCCGCTGTGTGGGCCGGAT
CCAGTGGGAAAGCTGCAGGTAATTTGATGCTCGGGACTGCAGGACTGCACAGGAAATGTTACCTACATC
TGTAACCACATTAATACGCAACAAATAGAGGCAATCTTCGTTACGCCATCACAGTGTCCCCAGCGCT
GCCCTGGCCGGGAGACTTCCGGATCTGGAACAGCCAGCTGATACGCTATGCGGGCTATAGGCAGCAGGA
TGGCTCCGTGCGAGGGGACCCCGCAACGTGGAGATCACTGAGCTCTGTATCAAACATGGCTGGACCCCA
GGAAATGGCCGCTTTGATGTGCTGCCCTGTTACTCCAGGCTCCTGATGAGCCCCAGAACTCTTCACTC
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AGGAAGAAGACCTTTAAGGAAGTAGCCAATGCAGTGAAGATCTCTGCCTCACTCATGGGCACGGTGATGG
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TCCTTTGACCCGCTGGCCAGAAATACCTGGTTCC

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG211798 representing BC052636
 Red=Cloning site Green=Tags(s)

MGNLKSVGQEPGPPCGLGLGLGLGLCGKQGPASPAPEPSQAPAPPSPTRPAPDHPPLTRPPDGPRFPRV
 KNWEVGSITYDTLSAQAAQDGPCTSRRLGSLVFPRKLQSRPTQGPSPTEQLLQQARDFINQYNSIKRS
 GSQAHEQRLQEVEAEVAATGTYYLRESELVFGAKQAWRNAPRCVGRIQWGKLQVFDARDCRTAQEMFTYI
 CNHIKYATNRGNLRSATIVFPQRCPPGRGDFRIWNSQLIRYAGYRQQDGSVRGDPANVEITELCIQHGWT
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 PFGSWYMSSEIGMRDLCDPHRYNILEDVAVCMDLDRTRTSSLWKDKAAVEINAVLHSYQLAKVTIVDHH
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 EHEALVLVVTSTFGNDPPENGESFAAALMEMSGPYNSSPRPEQHKSYKIRFNSVSCSDPLVSSWRRKRK
 ESSNTDSAGALGTLRFCVFGLSRAYPHFCAFARAVDTRLEELGGERLLQLGQDEL CGQEEAFRGWAQA
 AFQAACETFVCGEDAKAAARDIFSPKRSWKRQRYRLSTQAESLQLLPGLTHVHRRKMFQATILSVENLQS
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 PGWVRDPRLPCTLRQALTYFLDITSPSPRLLRLLSTLAEESSEQQELEALSQDPRRYEWWKWFSCPTL
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 QLKAGDPVPCFIRGAPSFRLPPDPNLPICILVGPGTGIAPFRGFWDRLHDIEIKGLQAPMTLVFGCRCS
 QLDHLRDEVLDAAQQRGVFGQVLTAFSRDPGSPKTYVQDLLRTELA AEVHRVLCLEQGHMFVCGDVTMAT
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 SFDPPGPEIPGS

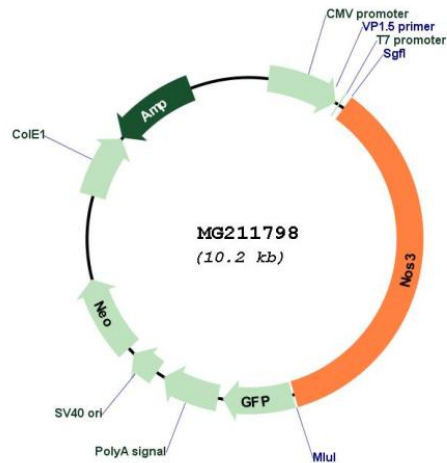
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: BC052636

ORF Size: 3606 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: [BC052636.1](#)

RefSeq Size: 3982 bp

RefSeq ORF: 3608 bp

Locus ID: 18127

Cytogenetics: 5 11.32 cM

Gene Summary:

Produces nitric oxide (NO) which is implicated in vascular smooth muscle relaxation through a cGMP-mediated signal transduction pathway. NO mediates vascular endothelial growth factor (VEGF)-induced angiogenesis in coronary vessels and promotes blood clotting through the activation of platelets. May play a significant role in normal and abnormal limb development.[UniProtKB/Swiss-Prot Function]