

## Product datasheet for MR226653

### Nos3 (NM\_008713) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nos3 (NM_008713) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nos3
Synonyms:	2310065A03Rik; ecNOS; eNOS; Nos-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR226653 representing NM_008713 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGCAACTGAAGAGTGTGGGCCAGGAGCCTGGGCCACCCTGTGGCCTAGGGCTCGGGCTGGGTTT  
GGCTGTGCGGCAAGCAGGGCCAGCCTCTCCAGCACCGGAGCCTAGCCAGGCGCCAGCACCCCGTCCCC  
AACCCGACCAGCACCAGACCACAGCCCCCGCTAACCCGGCCCCAGACGGACCCAGGTTTCTCGAGTA  
AAGAATTGGGAAGTGGGCAGCATCACCTACGACACCCTCAGTGCCAGGCTCAGCAGGATGGGCCCTGTA  
CCTCAAGACGCTGCTTGGGATCCCTGGTGTTCGAAGGAAGTTACAGAGCCGGCCACCCAGGGCCCTTC  
ACCCACTGAGCAGCTATTGGGTCAAGCCCGGACTTCATCAATCAGTACTATAACTCCATCAAAGGAGT  
GGCTCCCAGGCTCATGAGCAGCGCTTCAGGAAGTGGAGGCTGAGGTGGCAGCCACAGGCACCTACCAGC  
TCCGGGAGAGCGAGCTGGTGTGGGGCCAAGCAGGCCTGGCGCAATGCTCCCCGCTGTGTGGGCCGGAT  
CCAGTGGGGAAAGCTGCAGGTAATTTGATGCTCGGGACTGCAGGACTGCACAGGAAATGTTACCTACATC  
TGTAACCACATTAATAACGCAACAAATAGAGGCAATCTTCGTTACGCCATCACAGTGTCCCCCAGCGCT  
GCCCTGGCCGGGAGACTTCCGGATCTGGAACAGCCAGCTGATACGCTATGCGGGCTATAGGCAGCAGGA  
TGGCTCCGTGCGAGGGGACCCCGCAACGTGGAGATCACTGAGCTCTGTATCAAACATGGCTGGACCCCA  
GGAAATGGCCGCTTTGATGTGCTGCCCTGTTACTCCAGGCTCCTGATGAGCCCCAGAACTCTTCACTC  
TGCCCCCAGAGATGGTCTCGAGGTGCCTCTGGAGCACCCACGCTCGAGTGGTTTGTGCCCTTGGCCT  
GCGCTGGTATGCCCTCCAGCTGTGTCCAACATGCTGCTAGAAAATCGGGGCTGGAGTTTCTGTGTC  
CCTTTCAGCGGCTGGTACATGAGTTCAGAGATTGGCATGAGGGACCTGTGTGACCCTCACCGCTACAACA  
TACTTGAGGATGTGGCTGTGTGCATGGATCTGGACACCAGGACAACCTCATCCCTGTGGAAGACAAGGC  
AGCGGTGGAATAATGTGGCCGTGTTGCACAGTTACCAGCTGGCCAAAGTGACCATAGTGGACCACCAC  
GCCGCCACAGCCTCCTTCATGAAGCACCTGAAAATGAGCAGAAGGCCAGAGGGGGCTGCCCTGCCGATT  
GGGCTGGATTGTCCCCCATCTCAGGCAGCCTAACTCTGTCTTCCATCAAGAGATGGTCAACTATTT  
CCTGTCCCTGCCTCCGCTACCAGCCAGACCCCTGGAAGGAAGTGCAGCAAAGGGGCGAGGCATCACC



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AGGAAGAAGACCTTTAAGGAAGTAGCCAATGCAGTGAAGATCTCTGCCTCACTCATGGGCACGGTGATGG  
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 GGAGCTAGAGGCTCTCAGCCAGGACCCCGGCGCTACGAAGAATGGAAGTGGTTCAGCTGCCCCACTG  
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 CAGCTCAAGGCGGGAGATCCAGTGCCTGCTTTCATCAGGGGGGCTCCCTCCTTCCGGCTGCCACCTGATC  
 CTAACCTTGCCTGCATCCTGGTGGGCCAGGGACTGGCATTGCACCCTTCCGGGGATTCTGGCAAGACAG  
 ACTACACGACATTGAGATCAAAGGGCTACAACCTGCCCCATGACTTTGGTGTGGTGGCTGCCGATGCTCC  
 CAACTGGACCATCTTACCGGGACGAGGTACTGGACGCCAGCAGCGTGGGGTGTGGACAAGTCTCA  
 CCGCCTTTTCCAGGGATCCTGGCAGCCCAAGACCTACGTGCAAGACCTCCTGAGGACAGAGCTAGCCGC  
 GGAGGTTACCGTGTGCTGTGCCTTGGCAAGGACATATGTTTGTCTGCGGCGATGCTACTATGGCAACC  
 AGCGTCTGCAAACCGTGCAGAGAATTCTGGCAACAGAGGGCGGCATGGAGCTGGATGAAGCCGGTGACG  
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 GGTGACAAGCCGATACGCACCCAGAGCTTTTCTTTCAGGAGCGACAGCTGAGGGGCGCAGTGCCTGG  
 TCCTTTGACCCGCTGGCCAGAAATACCTGGTTCC

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR226653 representing NM\_008713  
 Red=Cloning site Green=Tags(s)

MGNLKSVGQEPGPPCGLGLGLGLGLCGKQGPASPAPEPSQAPAPPSPTRPAPDHSPLTRPPDGPRFRV  
 KNWEVGSITYDTLSAQAAQDGPCTSRCLGSLVFPRKLQSRPTQGPSPTEQLLQQARDFINQYNSIKRS  
 GSQAHEQRLQEVEAEVAATGTYQLRESELVFGAKQAWRNAPRCVGRIQWGLQVFDARDCRTAQEMFTYI  
 CNHIKYATNRGNLRSAITVFPQRCPPGRGDFRIWNSQLIRYAGYRQQDGSVRGDPANVEITELCIQHGWT  
 GNGRFDVLP LLLQAPDEPELFTLPPEMVLVPLEHPTLEWFAALGLRWYALPAVSNMLLEIGGLEFPAA  
 PFGSWYMSSEIGMRDLCDPHRYNILEDVAVCMDLDRTRTSSLWKDKAAVEINAVLHSYQLAKVTIVDHH  
 AATASFMKHLENEQKARGGCPADWAWIVPPI SGSLTPVVFHQEMVNYFLSPAFRYQDPWKGSAAKGAGIT  
 RKKTTFKEVANAVKISASLMGMTVMARVKATILYGSETGRAQSYAQLGRLFRKAFDPRVLCMDEYDVVSL  
 EHEALVLVVTSTFGNDPPENGESFAAALMEMSGPYNSSPRPEQHKSYKIRFNSVSCSDPLVSSWRKRK  
 ESSNTDSAGALGTLRFCVFLGSRAYPHFCAFARAVDTRLEELGGERLLQLGQDEL CGQEEAFRWAQA  
 AFQAACETF CVGEDAKAAARDIFSPKRSWKQRQRYRLSTQAESLQLLPGLTHVHRRKMFQATILSVENLQS  
 SKSTRATILVRLDTGGQEGLYQPGDHIGVCPNRPGLVEALLSRVEDPPPSTEPVAVEQLEKGSPPGPP  
 PGWVRDPRLPCTLRQALTYFLDITSPSPRLLRLLSTLAEESSEQQELEALSQDPRRYEWWKWFSCPTL  
 LEVLEQFPSVALPAPLILTQLPLLQPRYYSVSSAPSAHPGEIHLTIAVLAYRTQDGLGPLHYGVCSTWMS  
 QLKAGDPVPCFIRGAPSFRLPPDPNLPICILVPGGTGIAPFRGFWDRLHDIEIKLQPAPMTLVFGCRCS  
 QLDHLRDEVLDAQQRGVFGQVL TAFSRDPGSPKTYVQDLLRTELAEEVHRVLCLEQGHMFCGVDVMTAT  
 SVLQTVQRILATEGGMELDEAGDVIGVLRDQQRHYHEDIFGLTLRTQEVTSRIRTQSFSLQERQLRGAVPW  
 SFDPPGPEIPGS

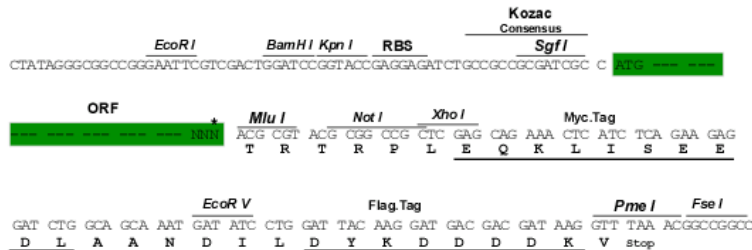
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



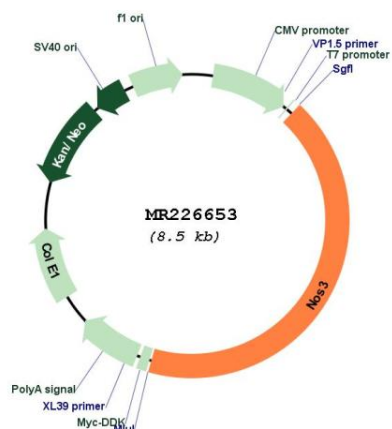
\* The last codon before the Stop codon of the ORF

ACCN: NM\_008713

ORF Size: 3606 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_008713.4</a> , <a href="#">NP_032739.3</a>
<b>RefSeq Size:</b>	4140 bp
<b>RefSeq ORF:</b>	3609 bp
<b>Locus ID:</b>	18127
<b>UniProt ID:</b>	<a href="#">P70313</a>
<b>Cytogenetics:</b>	5 11.32 cM
<b>MW:</b>	132.9 kDa
<b>Gene Summary:</b>	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]

Product images:



Circular map for MR226653