

Product datasheet for SC108440

eNOS (NOS3) (NM_000603) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	eNOS (NOS3) (NM_000603) Human Untagged Clone
Tag:	Tag Free
Symbol:	eNOS
Synonyms:	ECNOS; eNOS
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC108440 sequence for NM_000603 edited (data generated by NextGen Sequencing)

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ATGGGCAACTTGAAGAGCGTGGCCAGGAGCCTGGCCACCCTGCGGCCCTGGGGCTGGGG
CTGGGCCCTTGGGCTGTGCGGCAAGCAGGGCCAGCCACCCCGGCCCTGAGCCCAGCCGG
GCCCCAGCATCCCTACTCCACAGCGCCAGAACACAGCCCCCGAGCTCCCCGTAACC
CAGCCCCCAGAGGGGCCAAGTTCCTCGTGTGAAGAACTGGGAGGTGGGGAGCATCACC
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GAGCAGCTGCTGAGTCAGGCCGGGACTTCATCAACCAGTACTACAGCTCCATTAAGAGG
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GCTCCCCGCTGCGTGGGCCGGATCCAGTGGGGGAAGCTGCAGGTGTTGATGCCCCGGAC
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AACGCCGTGAAGATCTCCGCCTCGCTCATGGGCACGGTATGGCGAAGCGAGTGAAGGCC
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CTCTTCCGGAAGGCTTTTATCCCGGGTCTGTGTATGGATGAGTATGACGTGGTGTCC
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GTGCAGAACGCCAGCAGCGGGGTGTTTGGCCGAGTCTCACCCTTCTCCCGGAA
CCTGACAACCCCAAGACCTACGTGCAGGACATCCTGAGGACGGAGCTGGCTGCGGAGGTG
CACCGCTGCTGTGCCTCGAGCGGGCCACATGTTTGTCTGCGGGATGTTACCATGGCA
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GAGGCCGGCAGCTCATCGGCTGCTGCGGGATCAGCAACGCTACCACGAAGACATTTTC
GGGCTCACGCTGCGCACCCAGGAGGTGACAAGCCGCATACGCACCCAGAGCTTTTCTTG
CAGGAGCGTCAGTTGCGGGGCGCAGTGCCTGGGCTTCGACCCTCCCGGCTCAGACACC
AACAGCCCCTGA

Clone variation with respect to NM_000603.4
774 t=>c;894 t=>g;1998 c=>g

5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_000603 unedited CCCTAATTACCCCGCCCGTTGNAGCAAAGGGCGGTAGGCGTGTACGGTGGGAGGTCTAT ATAAGCAGAGCTCATGTTAGGTGACACTATAGAATACAAGCTACTTGTTCTTTTTGCAGC GGCCGCGAATTCGGCACGAGGCAGTAACATGGGCAACTTGAAGAGCGTGGCCAGGAGCC TGGGCCACCCTGCGGCCCTGGGGCTGGGGCTGGGCCTTGGGCTGTGCGCAAGCAGGGCCC AGCCACCCCGGCCCTGAGCCCAGCCGGGCCCCAGCATCCCTACTCCCACCAGCGCCAGA ACACAGCCCCCGAGCTCCCCGCTAACCCAGCCCCAGAGGGGCCAAGTTCCTCGTGT GAAGAAGTGGGAGGTGGGGAGCATCACCTATGACACCCTCAGCGCCAGGCGCAGCAGGA TGGGCCCTGCACCCCAAGACGCTGCCTGGGCTCCCTGGTATTTCCACGAAACTACAGGG CCGGCCCTCCCCCGGCCCCCGGCCCTGAGCAGCTGCTGAGTCAGGCCCGGGACTTCAT CAACCAGTACTACAGCTCCATTAAGAGGAGCGGCTCCCAGGCCACGAACAGCGGCTTCA AGAGGTGGAAGCCGAGGTGGCAGCCACAGGCACCTACCAGCTTAGGGAGAGCGAGCTGGT GTTCGGNGCTAAGCAGGCCTGGCGCAACGCTCCCGCTGCGTNGGCCGGATCCAGTGGGGG AAGCTGCAGGTGTTTCGATGCCCCGACTGCAGGTCTGCACAGGAAAAGTTCACCTACATC TGCAACCACATCAAGTATGCCCCAACCAGGGCCAACTTCCCTCGCCATCACAGTGTTCC CCCCCGGCTTGCTGGCCCGGAGAATTTCAAACCTGAACAGCCAAGTTGGGCGGTTA CCCGGGCTTACGGCAGCAGT</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_000603
Insert Size:	5000 bp
OTI Disclaimer:	<p>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.</p> <p>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</p>
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:	<ol style="list-style-type: none"> 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_000603.3 , NP_000594.2
RefSeq Size:	4341 bp

RefSeq ORF:	3612 bp
Locus ID:	4846
UniProt ID:	P29474
Cytogenetics:	7q36.1
Domains:	flavodoxin, NAD_binding_1, FAD_binding_1, NO_synthase
Protein Families:	Druggable Genome
Protein Pathways:	Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Arginine and proline metabolism, Calcium signaling pathway, Long-term depression, Metabolic pathways, Pathways in cancer, Small cell lung cancer, VEGF signaling pathway
Gene Summary:	<p>Nitric oxide is a reactive free radical which acts as a biologic mediator in several processes, including neurotransmission and antimicrobial and antitumoral activities. Nitric oxide is synthesized from L-arginine by nitric oxide synthases. Variations in this gene are associated with susceptibility to coronary spasm. Alternative splicing and the use of alternative promoters results in multiple transcript variants. [provided by RefSeq, Oct 2016]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). The 5' end of this transcript contains long terminal repeat (LTR) sequence, initiates from an LTR promoter and results in placenta-specific expression. (PMID: 18474398).</p>