

Product datasheet for **RG209228**

eNOS (NOS3) (NM_000603) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	eNOS (NOS3) (NM_000603) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	eNOS
Synonyms:	ECNOS; eNOS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG209228 representing NM_000603. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
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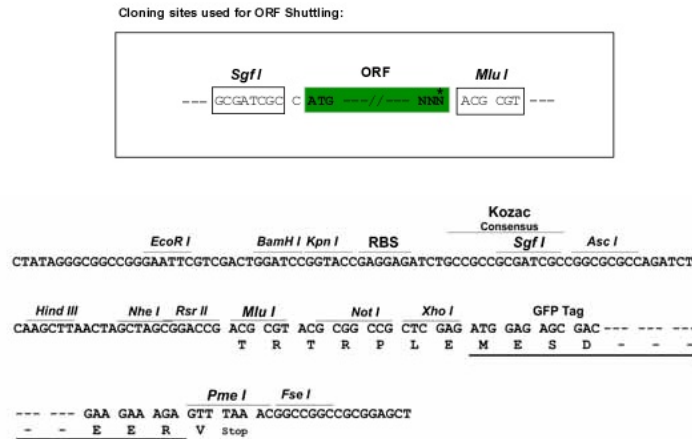
ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAAAC

Protein Sequence: >Peptide sequence encoded by RG209228
 Blue=ORF Red=Cloning site Green=Tag(s)

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 MGYGFYHFGTYPSGYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVI GDFKVMGTGFPEP
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000603

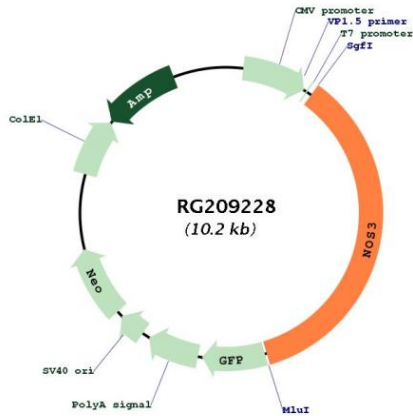
ORF Size: 3609 bp

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>
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:	<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 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
MW:	133.3 kDa

Gene Summary:

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]

Product images:



Circular map for RG209228