

Product datasheet for **RG228510**

eNOS (NOS3) (NM_001160111) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	eNOS (NOS3) (NM_001160111) 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)



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ORF Nucleotide Sequence:

>RG228510 representing NM_001160111
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGGCAACTGAAGAGCGTGGCCAGGAGCTGGGCCACCTGCGGCCTGGGGCTGGGGCTGGGCCTTG
 GGCTGTGCGGCAAGCAGGGCCAGCCACCCGGCCCTGAGCCAGCCGGGCCCCAGCATCCCTACTCCC
 ACCAGCGCCAGAACACAGCCCCGAGCTCCCCGCTAACCCAGCCCCAGAGGGGCCAAGTTCCTCGT
 GTGAAGAAGTGGGAGTGGGAGCATCACCTATGACACCCTCAGCGCCAGGCGCAGCAGGATGGCCCT
 GCACCCAAAGACGCTGCCTGGGCTCCCTGGTATTTCCACGGAACTACAGGGCGGCCCTCCCCGGCC
 CCCGGCCCTGAGCAGCTGCTGAGTCAGGCCGGGACTTCATCAACCAGTACTACAGCTCCATTAAGAGG
 AGCGGCTCCCAGGCCACGAACAGCGGCTTCAAGAGGTGGAAGCCGAGGTGGCAGCCACAGGCACCTACC
 AGCTTAGGGAGAGCGAGCTGGTGTTCGGGGCTAAGCAGGCTGGCGAACGCTCCCCGCTCGTGGGCCG
 GATCCAGTGGGGGAAGCTGCAGGTTCGATGCCCGGACTGCAGTCTGCACAGGAAATGTTACCTAC
 ATCTGCAACCACATCAAGTATGCCACCAACCGGGCAACCTTCGCTCGGCCATCACAGTGTCCCGCAGC
 GCTGCCCTGGCCGAGGAGACTTCCGAATCTGGAACAGCCAGCTGGTGGCTACGCGGGCTACCGGCAGCA
 GGATGGCTCTGTGCGGGGGACCCAGCCAACTGGAGATCACCGAGCTCTGCATTAGCAGCGCTGGACC
 CCAGGAAACGGTTCGCTTCGACGTGCTGCCCTGCTGCTGCAGGCCCCAGATGATCCCCAGAACTTTC
 TTCTGCCCCCGAGCTGGTCTTTCAGGTGCCCTGGAGCACCCACGCTGGAGTGGTTTGCAGCCCTGGG
 CCTGCGCTGGTACGCCCTCCCGCAGTGTCAAACATGCTGCTGGAATTTGGGGCCTGGAGTTCGCCGCA
 ACCCCCTCAGTGGTGGTACATGAGCACTGAGATCGGCACGAGGAACCTGTGTGACCTCACCGCTACA
 ACATCTGGAGGATGTGGCTGTCTGCATGGACCTGGATACCCGGACCACCTCGTCCCTGTGAAAGACAA
 GGCAGCAGTGGAAATCAACGTGGCCGCTGCACAGTTACCAGCTAGCCAAAGTACCATCGTGGACCAC
 CACGCCGCCACGGCTCTTTCATGAAGCACCTGGAGAATGAGCAGAAGGCCAGGGGGGGCTGCCCTGCAG
 ACTGGGCTGGATCGTGCCCCCATCTCGGGCAGCCTCACTCCTGTTTTCCATCAGGAGATGGTCAACTA
 TTTCTGTCCCCGGCTTCCGCTACCAGCCAGACCCTGGAAGGGGAGTGCCGCCAAGGGCACCGGCATC
 ACCAGGAAGAAGACCTTTAAAGAAGTGGCAACCGGTGAAGATCTCCGCTCGCTATGGGCACGGTGA
 TGGCGAAGCGAGTGAAGGCGACAATCCTGTATGGCTCCGAGACCGCCGGGCCAGAGCTACGCACAGCA
 GCTGGGGAGACTTCCGGAAGGCTTTTGATCCCCGGTCTGTGTATGGATGAGTATGACGTGGTGTCC
 CTGAACACGAGACGCTGGTGTGGTGAACAGCACATTTGGGAATGGGGATCCCCGGAGAATGGAG
 AGGGTCTCACTTTGTGGCCAGGCTGGAGTGCAGTAGTACAATACGGCTCACTGCAGCCTAACCTCCT
 AGACTCAAGCAATCCTCCCACTTCAACCTCCCAAGTAGTTGGGACTACAGGCGCATGCCATGATGCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG228510 representing NM_001160111
 Red=Cloning site Green=Tags(s)

MGNLKSVAQEPGPPCGLGLGLGLGCGKQPATPAPEPSRAPASLLPPAPEHSPPSSPLTQPPEGPKFPR
 VKNWEVGSITYDTLSAQAAQDGPCTPRRCLGSLVFPRKLQGRPSGPPAPEQLLSQARDFINQYSSIKR
 SGSQAHEQRLQEVEAEVAATGTYLRESELVFGAKQAWRNAPRCVGRIQWGLQVFDARDCRSAQEMFTY
 ICNHIKYATNRGNLRSAITVFPQRCPRGDFRIWNSQLVRYAGYRQDGSVRGDPANVEITELCIQHWG
 PGNGRFDVLPDLLQAPDDPELFLLPPELVLEVPLEHPTLEWFAALGLRWYALPAVSNMILLEIGGLEFPA
 APFSGWYMSTEIGTRNLCDPHRYNILEDVAVCMDLDRTRTSSLWKDKAAVEINAVLHSYQLAKVTIVDH
 HAATASFMKHLENEQKARGGCPADWAWIVPPIISGSLTPVFHQEMVNYFLSPAIFYQDPWKGSAAKGTGI
 TRKKTFFEVANAVKISASLMGMTVMKRVKATILYGSETGRAQSYAQLGRLFRKAFDPRVLCMDIYDVS
 LEHETLVVVTSTFGNGDPPENGEGLTLWPRLECSSTITAHCSLNLLDSSNPPTSTSQVVTGACHDA

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001160111

ORF Size: 1887 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: [NM_001160111.1](#), [NP_001153583.1](#)

RefSeq Size: 2546 bp

RefSeq ORF: 1890 bp

Locus ID: 4846

UniProt ID: [P29474](#)

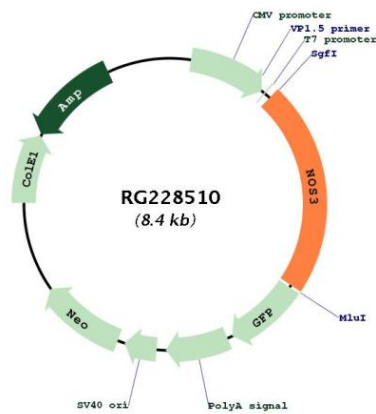
Cytogenetics: 7q36.1

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: 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 RG228510