

Product datasheet for RC222384L2V

OriGene Technologies, Inc.

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NOS1 (NM_000620) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: NOS1 (NM_000620) Human Tagged ORF Clone Lentiviral Particle

Symbol: NOS²

Synonyms: bNOS; IHPS1; N-NOS; NC-NOS; nNOS; NOS

Mammalian Cell

Selection:

None

Vector: pLenti-C-mGFP (PS100071)

Tag: mGFP

ACCN: NM_000620 **ORF Size:** 4302 bp

ORF Nucleotide

The OD

Sequence:

The ORF insert of this clone is exactly the same as(RC222384).

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.

RefSeq: <u>NM 000620.1</u>

 RefSeq Size:
 7124 bp

 RefSeq ORF:
 4305 bp

 Locus ID:
 4842

 UniProt ID:
 P29475

Cytogenetics: 12q24.22

Protein Families: Druggable Genome



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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

MW: 160.8 kDa

Gene Summary: The protein encoded by this gene belongs to the family of nitric oxide synthases, which

synthesize nitric oxide from L-arginine. Nitric oxide is a reactive free radical, which acts as a biologic mediator in several processes, including neurotransmission, and antimicrobial and antitumoral activities. In the brain and peripheral nervous system, nitric oxide displays many properties of a neurotransmitter, and has been implicated in neurotoxicity associated with stroke and neurodegenerative diseases, neural regulation of smooth muscle, including peristalsis, and penile erection. This protein is ubiquitously expressed, with high level of expression in skeletal muscle. Multiple transcript variants that differ in the 5' UTR have been

described for this gene but the full-length nature of these transcripts is not known.

Additionally, alternatively spliced transcript variants encoding different isoforms (some testis-

specific) have been found for this gene.[provided by RefSeq, Feb 2011]