

### **Product datasheet for RC222384L1**

# NOS1 (NM\_000620) Human Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: NOS1 (NM\_000620) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: NOS1

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

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

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

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

ACCN: NM\_000620

ORF Size: 4302 bp



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#### NOS1 (NM\_000620) Human Tagged Lenti ORF Clone - RC222384L1

**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:** <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

**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

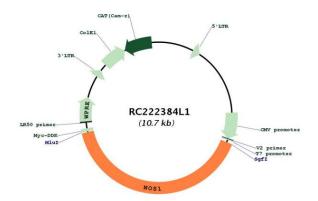
described for this gene but the full-length nature of these transcripts is not known.

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

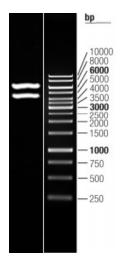
specific) have been found for this gene.[provided by RefSeq, Feb 2011]



# **Product images:**



Circular map for RC222384L1



Double digestion of RC222384L1 using Sgfl and Mlul  $\,$