

## **Product datasheet for TL311142V**

#### OriGene Technologies, Inc.

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### **NOS1 Human shRNA Lentiviral Particle (Locus ID 4842)**

#### **Product data:**

**Product Type:** shRNA Lentiviral Particles

**Product Name:** NOS1 Human shRNA Lentiviral Particle (Locus ID 4842)

**Locus ID:** 4842

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

**Vector:** pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: NOS1 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: NM 000620, NM 001204213, NM 001204214, NM 001204218, NM 000620.1, NM 000620.2,

NM 000620.3, NM 000620.4, NM 001204213.1, NM 001204214.1, NM 001204218.1,

BC010126, BC033208, BC156399, BC172474, NM 000620.5

UniProt ID: P29475

**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]

**shRNA Design:** These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.





# Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).