

## Product datasheet for **TP322384**

### **NOS1 (NM\_000620) Human Recombinant Protein**

#### Product data:

**Product Type:** Recombinant Proteins  
**Description:** Recombinant protein of human nitric oxide synthase 1 (neuronal) (NOS1), 20 µg  
**Species:** Human  
**Expression Host:** HEK293T  
**Expression cDNA** >RC222384 representing NM\_000620  
**Clone or AA Sequence:** **Red**=Cloning site **Green**=Tags(s)

MEDHMFVQVQIQPNVISVRLFKRKVGGGLGFLVKERVSKPPVIIISDLIRGGAAEQSGLIQAGDIILAVNGR  
PLVDLSYDSALEVLRGIASETHWLILRGPEGFTTHLETTFTGDGTPKTIRVTQPLGPPTKAVDLSHQPP  
AGKEQPLAVD GASPGNGPQHAYDDGQEAGSLPHANGLAPRPPGQDPAKKATRVSLQGRGENNELLKEIE  
PVLSELLTSGSRGVKGGAPAKAEMKDMGIQVDRDLDGKSHKPLPLGVENDRVFNDLWVGKGNVPLVNNPYS  
EKEQPPTSGKQSPTKNGSPSKCPRFLKVKNWETEVLDTLHLKSTLETGCTEYICMGSIMHPSQHARRP  
EDVRTKQQLFPLAKEFIDQYSSIKRFGSKAHMERLEEVENKEIDTTSTYQLKDELIYGAKHAWRNASRC  
VGRIQWSKLQVFDARDCTTAHGMFNYICNHVKYATNKGNLRSAITIFPQRTDGKHD FRVWNSQLIRYAGY  
KQPDGSLGDPANVQFTEICIQQGWKPPRGRFDVLP LLLQANGNDPELFQIPPELVLEVP IIRHPKFEWFK  
DLGLKWYGLPAVSNMLLEIGGLEFSACPFSGWYMGTEIGVRDYCDNSRYNILEEVAKKMNLDMRKTSSLW  
KDQALVEINIAVLYSFQSDKVTIVDHSATESFIKHMENEYRCRGGCPADWVWVPPMSGSITPVFHQEM  
LNYRLTPSFEYQPDWNTWVWKGNTGTPTKRRAIGFKLAEAVKFSAKLMGQAMAKRVKATILYATETGK  
SQAYAKTLCEIFKHAFDAKVMSEEDYDIVHLEHETLVLVVTSTFGNGDPPENGEKFGCALMEMRHPNSVQ  
EERKSYKVRFNVSYSYSDSQKSSGDGPD LRDNFESAGPLANVRFVSVFGLGSRAYPHFCAFGHAVDTLLEE  
LGGERILKMREGDEL CGQEEAFRTWAKKVFAACDVFCVGDVNI EKANNSLISNDRSWKRNFRLTFVA  
EAPELTQGLSNVHKKRVSAA RLLSRQNLQSPKSSRSTIFVRLHTNGSQELQYQPGDHLGVFPGNHEDLVN  
ALIERLEDAPPVNMV KVELLEERN TALGVISNWTDELRLPPCTIFQAFKYLDITTPPTPLQLQFASL  
ATSEKEKQRLLVLSKGLQEYEEWKWGKNPTIVEVLEEFPSIQMPATLLLTQLSLLQPRYYSISSSPDMYP  
DEVHILTVAIVSYRTRDGE GPIHHGVCSSWLNRIQADELVPCFVRGAPSFHLPRNPQVPCILVPGGTGIAP  
FRSFWQQRQFDIQHKGMN PPMVLVFGCRQSKIDHIYREETLQAKNKGVFRELYTAYSREPKPKKYVQD  
ILQEQLAESVYRALKEQGGHIYVCGDVTMAADVLKAIQRIMTQQGKLSAEDAGVFISMRDDNRYHEDIF  
GVTLRTYEVTNRLRSESI AFIEESK KDTDEVFSS

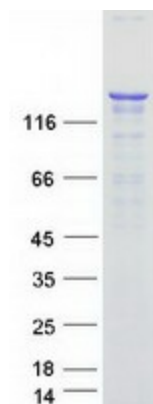
**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK  
**Predicted MW:** 160.8 kDa



[View online »](#)

<b>Concentration:</b>	>0.05 µg/µL as determined by microplate BCA method
<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_000611</a>
<b>Locus ID:</b>	4842
<b>UniProt ID:</b>	<a href="#">P29475</a> , <a href="#">B3VK56</a> , <a href="#">B4DG68</a> , <a href="#">A0PJJ7</a>
<b>RefSeq Size:</b>	7124
<b>Cytogenetics:</b>	12q24.22
<b>RefSeq ORF:</b>	4302
<b>Synonyms:</b>	bNOS; IHPS1; N-NOS; NC-NOS; nNOS; NOS
<b>Summary:</b>	<p>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]</p>
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	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

**Product images:**

Coomassie blue staining of purified NOS1 protein (Cat# TP322384). The protein was produced from HEK293T cells transfected with NOS1 cDNA clone (Cat# [RC222384]) using MegaTran 2.0 (Cat# [TT210002]).