

Product datasheet for PH322384

NOS1 (NM_000620) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	NOS1 MS Standard C13 and N15-labeled recombinant protein (NP_000611)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC222384
Predicted MW:	160.8 kDa
Protein Sequence:	>RC222384 representing NM_000620 Red=Cloning site Green=Tags(s)

MEDHMFVGVQIQPNVISVRLFKRKVGGGLGFLVKERVSKPPVVISDLIRGGAAEQSGLIQAGDIILAVNGR
PLVDLSYDSALEVLRGIASETHVVLILRPEGFTTHLETTFTGDGTPKTIKRVTPQLGPPTKAVDLHQPP
AGKEQPLAVDVGASGPGNGPQHAYDDGQEAAGSLPHANGLAPRPPGQDPAKKATRVSLQGRGENNELLKEIE
PVL SLL TSGSRGVKGGAPAKAEMKDMGIQVDRDLGKSHKPLPLGVENDRVFNDLWGKGNVPPVLLNPPYS
EKEQPPTSGKQSPKNGSPSKCPFLKVKNWETEVLDTLHLKSTLETGCTEYICMGSIMHPSQHARRP
EDVRTKQQLFPLAKEFIDQYYSSIKRFGSKAHMERLEEENKEIDTTSTYQLKDELIYGAKHAWRNASRC
VGRIQWSKLQVFDARDCTTAHGFMFNYICNHVKYATNKGNLRSATIFPQRTDGGKDFRVWNSQLIRYAGY
KQPDGSTLGD PANVQFTEICIQGWKPPRGRFDVLP LLLQANGNPELFIPELVEVPIRHPKFEWFK
DLGLKWYGLPAVSNMLLEIGGLEFSACPFSGWYMGTEIGVRDYCDNSRYNILEEVAKKMNLDMRKTS
KQALVEINIAVLYSFQSDKVTIVDHSATESFIKHMENEYRCRGGCPADWVWIVPPMSSGISTPVFHQEM
LNYRLTPSFEYQDPWNTHVWKGNTGPTKRRRAIGFKKLAEAVKFSAKLMGQAMAKRVKATILYATETGK
SQAYAKTLCEIFKHAFDAKVMSEYDIVHLEHETLVLVVTSTFGNGDPPENGEKFGCALMEMRHPNSVQ
EERKSYKVRFNVSYSYSDSQSSGDGPDLRDNFESAGPLANVRFVSVFGLGSRAYPHFCAGHAVDTLLEE
LGGERILKMREGDEL CGQEEAFRTWAKKVFKAACDVFCVGDVNI EKANNSLISNDRSWKRNFRLTFVA
EAPELTQGLSNVHKRVSAAARLLSRQNLQSPKSSRSTIFVRLHTNGSQELQYQPGDHLGVFPGNHEDLVN
ALIERLEDAPPVNMVVELLEERNTALGVI SNWTDELRLPPCTIFQAFKYLLDITTPPTPLQLQFASL
ATSEKEQRLLVLSKGLQEYEEWKWGKNPTIVEVLEEFPSIQMPATLLLTQLSLLQPRYYSISSSPDMYP
DEVHLLTVAIVSYRTRDGEPIHHGVCSWLNRIQADELVPCFVRGAPSFHLPRNPQVPCILVGPGTGIAP
FRSFWQQRQFDIQHKGMNCPMVLVFGCRQSKIDHIYREETLQAKNKGVFRELYTAYSREPKPKKYVQD
ILQEQLAESVYRALKEQGGHIYVCGDVTMAADVLKAIQRIMTQQGKLSAEDAGVFI SRMRDDNRYHEDIF
GVTLRTYEVTNRLRSESI AFIEESKKTDEVFSS

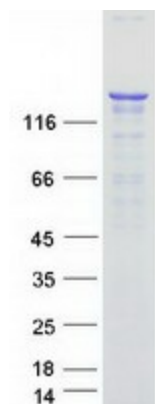
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining



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Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_000611
RefSeq Size:	7124
RefSeq ORF:	4302
Synonyms:	bNOS; IHPS1; N-NOS; NC-NOS; nNOS; NOS
Locus ID:	4842
UniProt ID:	P29475 , B3VK56 , B4DG68 , A0PJJ7
Cytogenetics:	12q24.22
Summary:	<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>
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

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]).