

Product datasheet for **AM20651PU-N**

NOS1 (1-181) Mouse Monoclonal Antibody [Clone ID: N1]

Product data:

Product Type:	Primary Antibodies
Clone Name:	N1
Applications:	IHC, WB
Recommended Dilution:	Western Blot: 0.5 µg/ml.
Reactivity:	Goat, Human, Porcine, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Protein A fusion protein
Specificity:	This antibody reacts to NOS1 (1-181).
Formulation:	1.2 % sodium acetate, with 2 mg BSA and 0.01 mg sodium azide as preservative. State: Purified State: Lyophilized purified Ig fraction
Reconstitution Method:	Restore with 1.2% sodium acetate or neutral PBS
Concentration:	0,1 mg/ml (after reconstitution with PBS)
Purification:	Affinity chromatography
Conjugation:	Unconjugated
Storage:	Prior to reconstitution store at -20°C. Following reconstitution store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	nitric oxide synthase 1
Database Link:	Entrez Gene 24598 Rat Entrez Gene 4842 Human P29475



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Background:

Nitric Oxide Synthase 1 (NOS1, neuronal NOS, nNOS1) is a messenger molecule, mediating the effect of endothelium-derived relaxing factor in blood vessels and the cytotoxic actions of macrophages, and playing a part in neuronal communication in the brain. It may be involved in neuronal cell death and damage in neurological illness. nNOS1 localized to the 12q24.2 region of human chromosome 12. It splice variant, expressed in testis, that encodes an NH₂-terminal truncated protein of 1098 amino acids. nNOS cDNA clones were shown to contain different 5' terminal exons spliced to a common exon 2. Genomic cloning and sequence analysis demonstrate that the unique exons are positioned within 300 bp of each other but separated from exon 2 by an intron that is at least 20 kb in length. The neuronal isoform of nitric oxide synthase is highly expressed in mammalian skeletal muscle, it suggested a specific role for NOS1 in the local metabolic inhibition of alpha-adrenergic vasoconstriction in active skeletal muscle. The novel gaseous neuromediator nitric oxide is thought to play an important role in development and plasticity. Despite this, gene-knockout mice lacking neuronal (Type I) nitric oxide synthase exhibit relatively normal brain development and behavior.

Synonyms:

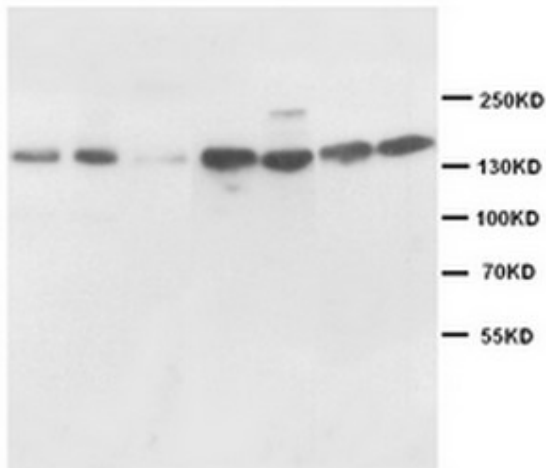
bNOS, nNOS, NOS type I, Neuronal NOS, Constitutive NOS, NC-NOS

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:

Lane 1: Rat brain tissue lysate Lane 2: Rat brain tissue lysate Lane 3: Rat medulla oblongata tissue lysate Lane 4: MCF-7 whole cell lysate Lane 5: SMMC whole cell lysate Lane 6: SW620 whole cell lysate Lane 7: Colo320 whole cell lysate

