

## Basic Information

Product Name	Anti-nNOS/NOS1 Antibody
Gene Name	NOS1
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human nNOS(neuronal), identical to the related mouse sequence, and different from the related rat sequence by one amino acid.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	161 kDa
Dilution Ratios	Western blot (WB):1:500-2000

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

Nitric oxide synthase 1 (neuronal), also known as NOS1, is an enzyme that in humans is encoded by the NOS1 gene. 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.

## Selected Validation Data



Western blot analysis of nNOS/NOS1 using anti-nNOS/NOS1 antibody (A01070). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,

Lane 2: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-nNOS/NOS1 antigen affinity purified polyclonal antibody (A01070) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for nNOS/NOS1 at approximately 161 kDa. The expected band size for nNOS/NOS1 is at 161 kDa.