

nNOS1 Antibody [clone NOS-B1] (R30063)

Catalog No.	Formulation	Size
R30063	0.5mg/ml with 1% BSA and 0.01% sodium azide if reconstituted with 0.2ml sterile 1X PBS	100 ug

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Availability	1-3 business days
Species Reactivity	Human, Rat, Goat, Pig
Format	Ascites
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1
Clone Name	NOS-B1
Purity	Ascites
Gene ID	4842
Applications	Western Blot : 0.5ug/ml
Limitations	This nNOS1 antibody is available for research use only.



Description

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. nNOS localized to the 12q24.2 region of human chromosome 12. There is a 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, suggesting 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.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the nNOS1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A rat partial recombinant neuronal NOS protein (amino acids 1-181) was used as the immunogen for this nNOS1 antibody.

Storage

After reconstitution, the nNOS1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.