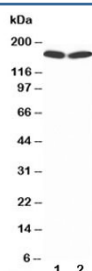


## nNOS Antibody / NOS1 (R30392)

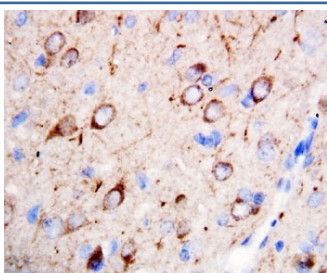
| Catalog No. | Formulation                                           | Size   |
|-------------|-------------------------------------------------------|--------|
| R30392      | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

|                           |                                                                          |
|---------------------------|--------------------------------------------------------------------------|
| <b>Availability</b>       | 1-3 business days                                                        |
| <b>Species Reactivity</b> | Human, Mouse, Rat                                                        |
| <b>Format</b>             | Antigen affinity purified                                                |
| <b>Clonality</b>          | Polyclonal (rabbit origin)                                               |
| <b>Isotype</b>            | Rabbit IgG                                                               |
| <b>Purity</b>             | Antigen affinity                                                         |
| <b>Buffer</b>             | Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal |
| <b>UniProt</b>            | P29475                                                                   |
| <b>Applications</b>       | Western Blot : 0.5-1ug/ml<br>Immunohistochemistry (FFPE) : 0.5-1ug/ml    |
| <b>Limitations</b>        | This nNOS antibody is available for research use only.                   |



Western blot testing of nNOS antibody and Lane 1: rat brain lysate; 2: human MCF-7 lysate; Predicted molecular weight ~160 kDa.



IHC-P: nNOS antibody testing of rat brain tissue

## 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. nNOS1 localized to the 12q24.2 region of human chromosome 12. It splice variant, expressed in testis, that encodes an NH<sub>2</sub>-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.

## Application Notes

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

## Immunogen

An amino acid sequence from the C-terminus of nNOS (IAFIEESKKDTDEVFSS) was used as the immunogen for this nNOS antibody (100% homologous human, mouse and rat).

## Storage

After reconstitution, the nNOS 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.