

## iNos/Nos-2 Rabbit pAb

Catalog Number: BN40607R

Target Protein: iNos/Nos-2

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: IHC-P (1:400-800), IHC-F (1:400-800), IF (1:100-500)

Reactivity: Rat (predicted:Mouse,Rabbit)

Predicted MW: 130 kDa

Entrez Gene: 4843

Swiss Prot: P35228

Source: KLH conjugated synthetic peptide derived from human iNos/Nos-2: 1051-1153/1153.

Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** Nitric oxide (NO) is an inorganic, gaseous free radical that carries a variety of messages between cells. Vasorelaxation, neurotransmission and cytotoxicity can all be potentiated through cellular response to NO. NO production is mediated by members of the nitric oxide synthase (NOS) family. NOS catalyzes the oxidization of L-arginine to produce L-citrulline and NO. Two constitutive isoforms, brain or neuronal NOS (b or nNOS, type I) & endothelial cell NOS (eNOS, type III), and one inducible isoform (iNOS, type II), have been cloned. All NOS isoforms contain calmodulin, nicotinamide adenine dinucleotide phosphate (NADPH), flavin adenine dinucleotide (FAD), and flavin mononucleotide (FMN) binding domains. Nitric oxide synthase is expressed in liver, macrophages, hepatocytes, synoviocytes, stimulated glial cells and smooth muscle cells. Cytokines such as interferon-gamma (IFN), tumor necrosis factor (TNF), interleukin-1 and -2, and lipopolysaccharides (LPS) cause an increase in iNOS mRNA, protein, and activity levels. Protein kinase C-stimulating agents exhibit the same effect on iNOS activity. After cytokine induction, iNOS exhibits a delayed activity response which is then followed by a significant increase in NO production over a long period of time. Human iNOS is regulated by calcium/calmodulin (in contrast with mouse NOS2).