

## Anti-iNOS (Tyr-1055) [conserved site], Phosphospecific Antibody

Catalog # AN1869

#### **Specification**

## Anti-iNOS (Tyr-1055) [conserved site], Phosphospecific Antibody - Product Information

Application WB
Primary Accession P35228
Reactivity Bovine
Host Rabbit

Clonality Rabbit Polyclonal

Isotype IgG
Calculated MW 131117

## Anti-iNOS (Tyr-1055) [conserved site], Phosphospecific Antibody - Additional Information

Gene ID 4843

**Other Names** 

Nos2 nitric oxide synthase 2, inducible, macrophage, NOS, type II, NOSII, Hepatocyte

**Dilution** 

WB~~1:1000

## Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Anti-iNOS (Tyr-1055) [conserved site], Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Shipping**

Blue Ice

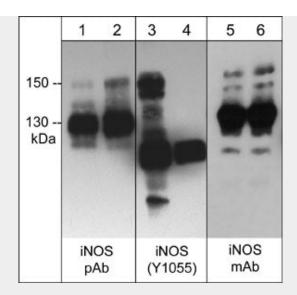
## Anti-iNOS (Tyr-1055) [conserved site], Phosphospecific Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

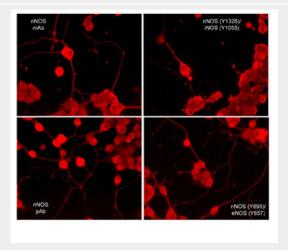
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Anti-iNOS (Tyr-1055) [conserved site], Phosphospecific Antibody - Images





Western blot analysis of mouse macrophages (J774A.1) treated with LPS (1  $\mu$ g/ml) for 18 hrs followed by pervanadate (1 mM) for 30 min. (lanes 1, 3 & 5). The blots were then treated with akaline phosphatase (lanes 2, 4 & 6). Blots were probed with rabbit polyclonal anti-inducible Nitric Oxide Synthase (iNOS) (lanes 1 & 2), anti-iNOS (Tyr-1055) (lanes 3 & 4), and mouse monoclonal anti-iNOS (lanes 5 & 6).



Immunocytochemical labeling of nNOS phosphorylation in rat PC12 cells differentiated with NGF. The cells were probed with mouse monoclonal (mAb) nNOS (NM4011), and rabbit polyclonal (pAb) nNOS (C-terminal region), nNOS (Tyr-895)/eNOS (Tyr-657), and nNOS (Tyr-1326)/iNOS (Tyr-1055). The antibodies were detected using appropriate secondary antibody conjugated to DyLight® 594.

# Anti-iNOS (Tyr-1055) [conserved site], Phosphospecific Antibody - Background

Nitric oxide synthases (NOS), the enzymes responsible for synthesis of NO, are homodimers whose monomers are themselves two fused enzymes: a cytochrome reductase and a cytochrome that requires three cosubstrates (L-arginine, NADPH, and oxygen) and five cofactors or prosthetic groups (FAD, FMN, calmodulin, tetrahydrobiopterin, and heme). Several distinct NOS isoforms are produced from three distinct genes, inducible NOS (iNOS, NOS-II), neuronal NOS (bNOS, NOS-I), and endothelial NOS (eNOS, ecNOS, NOS-III). The inducible form of NOS, iNOS, is Ca2+ independent and is expressed in a broad range of cell types in response to stimulation with cytokines and exposure to microbial products. Phosphorylation of iNOS may regulate its activity and stability. Src kinase-induced phosphorylation of Tyr-1055 in iNOS reduces proteasomal degradation of iNOS, leading to increased NO production. Thus, phosphorylation may be an additional control for regulating iNOS activity in response to inflammatory conditions.