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

Catalog # AN1869

## Product Information

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|---|---|
| **Application** | WB, ICC |
| **Primary Accession** | P35228 |
| **Host** | Rabbit |
| **Clonality** | Rabbit Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 131117 |

## Additional Information

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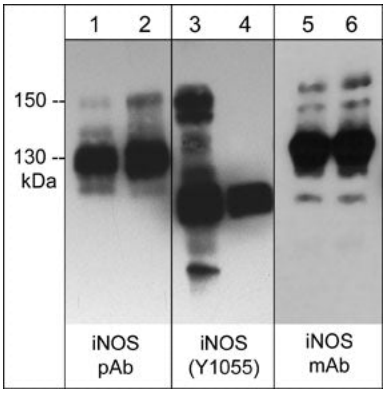
|---|---|
| **Gene ID** | 4843 |
| **Other Names** | Nos2 nitric oxide synthase 2, inducible, macrophage, NOS, type II, NOSII, Hepatocyte |
| **Dilution** | WB~~1:1000 ICC~~N/A |
| **Storage** | Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots 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 |

## Background

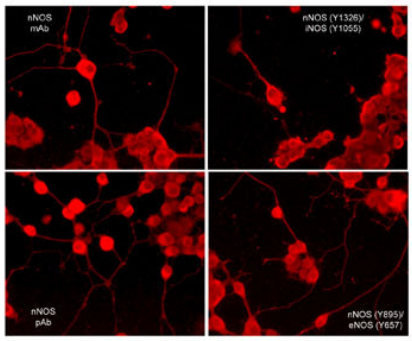
Nitric oxide synthases (NOS), the enzymes responsible for synthesis of NO, are homodimers whose monomers are themselves two fused enzymes: a cytochrome reductase and a cytochrome that requires three cosubstrates (L-arginine, NADPH, and oxygen) and five cofactors or prosthetic groups (FAD, FMN, calmodulin, 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.

## Images

Western blot analysis of mouse macrophages (J774A.1) treated with LPS (1 µg/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.