

Inducible Nitric Oxide Synthase

Cat. # NP2131

Host Rabbit Polyclonal

Size 100 µl

Background:

Nitric oxide (NO) has a broad range of biological activities and is implicated in signaling pathways in phylogenetically diverse species. 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 O₂) and five cofactors or prosthetic groups (FAD, FMN, calmodulin, tetrahydrobiopterin, and heme). Several distinct NOS isoforms are produced from three distinct genes. These include two constitutive Ca²⁺/CaM-dependent forms of NOS: nNOS (also designated bNOS, NOS-I), whose activity was first identified in neurons and eNOS (also designated ecNOS, NOS-III) first identified in endothelial cells. The inducible form of NOS, iNOS (also designated NOS-II), is Ca²⁺ independent and is expressed in a broad range of cell types. This form of NOS is induced after stimulation with cytokines and exposure to microbial products.

References

Kleinert, H. et al. (2003) Biol Chem. 384(10-11):1343.

Xie, Q.W. et al. (1992) Science 256:225.

Immunogen:

Amino acid residues within the C-terminal region of human iNOS. The human iNOS sequence used has high homology with similar regions in rat and mouse iNOS.

Applications:

WB 1:2000

ELISA 1:4000

End user should determine optimal dilution for their particular applications and experiments. Western blot membranes were incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

Related Products:

NP2141 Neuronal Nitric Oxide Synthase Rabbit Polyclonal

ML9601 Mouse Macrophage IFN/LPS Ctrl Lysate

ML9701 Mouse Macrophage + IFN/LPS Lysate

NM2211 Endothelial Nitric Oxide Synthase (C-terminal region) Mouse Monoclonal

NP2281 Endothelial Nitric Oxide Synthase Rabbit Polyclonal

NM2321 Endothelial Nitric Oxide Synthase (Ser-632), phospho-specific Mouse



Western blot analysis of mouse macrophages untreated (lane 1) or treated (lane 2) with IFN γ (10 ng/ml) and LPS (1 µg/ml) for 12 hr (20 µg/lane). Blots were probed with anti-inducible Nitric Oxide Synthase (iNOS) (NP2131; 1:2000).

Buffer and Storage:

Rabbit polyclonal, affinity-purified antibody is supplied in 100 µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Do not aliquot. Stable for 1 year.

Specificity:

The antibody detects a 130 kDa* protein on SDS-PAGE immunoblots of mouse macrophages treated with IFN γ and LPS.

*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

www.ecmbiosciences.com
telephone: 859-879-2075
toll-free: 1-800-859-8202
tech: info@ecmbiosciences.com

ECMBiosciences

Rev 6/6/2008