

# Inducible Nitric Oxide Synthase (C-terminal region)

Cat. # NM3981

Host Mouse Monoclonal IgG2a

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 O<sub>2</sub>) 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 Ca<sup>2+</sup>/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 Ca<sup>2+</sup> 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:

Clone (M398) was generated from a recombinant protein that included 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.

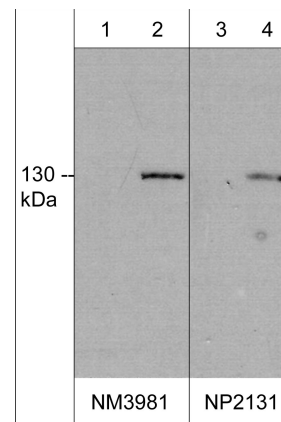
## Applications:

WB	1:250
ELISA	1:1000
ICC	1:50

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:

- NP2131 Inducible Nitric Oxide Synthase Rabbit Polyclonal  
NP2141 Neuronal Nitric Oxide Synthase Rabbit Polyclonal  
NP2281 Endothelial Nitric Oxide Synthase Rabbit Polyclonal  
NM2211 Endothelial Nitric Oxide Synthase (C-terminal region) Mouse Monoclonal  
NP4031 Endothelial Nitric Oxide Synthase (Tyr-657), phospho-specific [conserved  
NM2321 Endothelial Nitric Oxide Synthase (Ser-632), phospho-specific Mouse



Western blot analysis of mouse macrophages untreated (lanes 1 & 3) or treated with LPS (1 µg/ml) for 18 hrs (lanes 2 & 4). The blots were probed with mouse monoclonal anti-iNOS at 1:500 (lanes 1 & 2) or rabbit polyclonal anti-iNOS at 1:250 (NP2131).

## Buffer and Storage:

Mouse monoclonal antibody purified with protein A chromatography 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 (RAW264.7) treated with IFN $\gamma$  and LPS, or J774A.1 cells treated with LPS only.

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

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