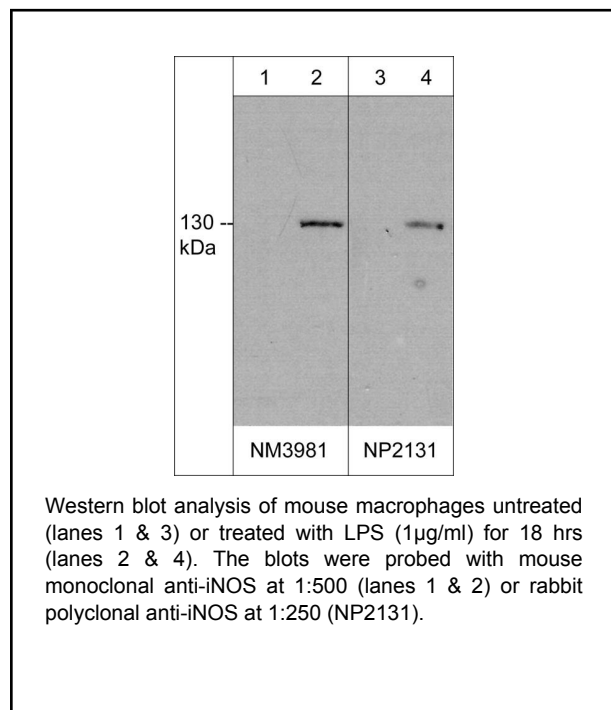


### Background

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 oxygen) 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.

### Background References

Xie, Q.W. et al. (1992) *Science* 256:225.  
 Kleinert, H. et al. (2003) *Biol Chem.* 384(10-11):1343.  
 Musicki, B. et al. (2005) *Proc. Natl. Acad. Sci.* 102(33):11870.



### Applications

WB 1:2000  
 ELISA 1:4000  
 ICC 1:100

### Species Reactivity

Hu, Rt, Ms

### 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.

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.

### Immunogen

Uniprot ID: P35228

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.

### Buffer and Storage

Rabbit polyclonal, affinity-purified antibody is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Stable for 1 year.

### Related Products

ML8731 Mouse Macrophage LPS Control Lysate  
 ML8741 Mouse Macrophage + LPS (18 hr) Lysate  
 NM2211 eNOS (C-terminal region) Mouse Monoclonal  
 NP2281 eNOS Rabbit Polyclonal  
 NM2321 eNOS (Ser-632), phospho-specific Mouse Monoclonal

### Product References

Wang, F. et al. (2018) *EBioMedicine.* 30:303.  
 WB: mouse BMDM macrophage

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