

Neuronal Nitric Oxide Synthase (C-terminal region)

Cat. # NM4011

Host Mouse Monoclonal IgG2a

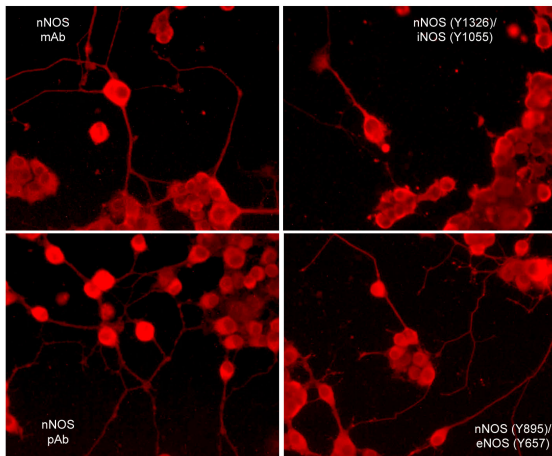
Size 100 µl

Background:

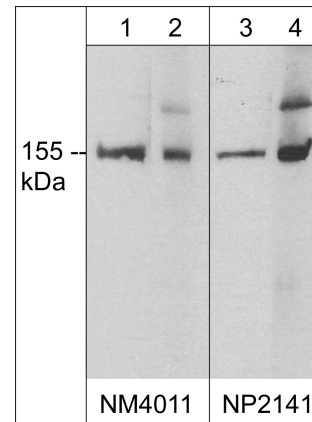
Nitric oxide (NO) has a broad range of biological activities and is implicated in signaling pathways in phylogenetically diverse species. Nitric oxide synthases (NOS), the enzymes responsible for synthesis of NO, are homodimers whose monomers are themselves two fused enzymes: a cytochrome reductase and a cytochrome that requires three cosubstrates (L-arginine, NADPH, and 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.



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.



Western blot analysis of nNOS expression in adult mouse brain (lanes 1 & 3) and rat GC cells (lanes 2 & 4). The blots were probed with mouse monoclonal anti-nNOS (C-terminal region) at 1:1000 (lanes 1 & 2) or rabbit polyclonal anti-nNOS at 1:250 (lanes 3 & 4).

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

web: www.ecmbiosciences.comemail: info@ecmbiosciences.com

telephone: 859-879-2075

toll-free: 1-800-859-8202

Neuronal Nitric Oxide Synthase (C-terminal region)

Cat. #	NM4011
Host	Mouse Monoclonal IgG2a
Size	100 µl

Immunogen:

Clone (M401) was generated from a recombinant protein that included amino acid residues within the C-terminal region of human nNOS. This human nNOS sequence has high homology with similar regions in rat and mouse nNOS.

Buffer and Storage:

Mouse monoclonal antibody purified with protein A chromatography is supplied in 100µl 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.

Applications:

WB	1:1000	ICC	1:100
ELISA	1:2000		
IHC	1:200		

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 1hour at room temperature.

Specificity:

The antibody detects a 155 kDa* protein on SDS-PAGE immunoblots of rat and mouse brain tissue lysates, as well in the rat pituitary cell line GC.

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

Related Products:

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

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

web: www.ecmbiosciences.com

telephone: 859-879-2075

email: info@ecmbiosciences.com

toll-free: 1-800-859-8202

ECMBiosciences