

Mouse nNOS Monoclonal Antibody | anti-nNOS antibody

nNOS (C-terminal region) M401 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71673	Mouse	Human, Rat, Mouse	Immunohistochemistry, Immunocytochemistry, ELISA, Western Blot

PRODUCT SYNONYMS

nNOS; Monoclonal Antibody; nNOS (C-terminal region) M401 Antibody; nNOS (C-terminal region); NOSn m; anti-nNOS antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Rat, Mouse
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	M401
Specificity	The antibody detects a 155kDa* protein on SDS-PAGE immunoblots of rat and mouse brain tissue lysates, as well in the rat pituitary cell line GC.
Purity/Purification	Protein A chromatography
Form/Format	Mouse monoclonal antibody purified with protein A chromatography is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-nNOS antibody	IHC (Immunohistochemistry), ICC (Immunocytochemistry), ELISA, WB (Western Blot)
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.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

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.



WB (Western Blot)

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).

ADDITIONAL INFORMATION

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

NCBI AND UNIPROT INFORMATION

NCBI GI #	10835173
NCBI GeneID	4842
NCBI Accession #	NP_000611.1
NCBI GenBank Nucleotide #	NM_000620.4
UniProt Accession #	P29475; O75713; E9PH30
Molecular Weight	160,970 Da
NCBI Official Full Name	nitric oxide synthase, brain isoform 1
NCBI Official Synonym Full Names	nitric oxide synthase 1 (neuronal)
NCBI Official Symbol	NOS1
NCBI Official Synonym Symbols	NOS; bNOS; nNOS; IHPS1; N-NOS; NC-NOS
NCBI Protein Information	nitric oxide synthase, brain; NOS type I; neuronal NOS; constitutive NOS; peptidyl-cysteine S-nitrosylase NOS1
UniProt Protein Name	Nitric oxide synthase, brain
UniProt Gene Name	NOS1
UniProt Synonym Gene Names	N-NOS; nNOS
UniProt Entry Name	NOS1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.