

Rabbit NOS1 Polyclonal Antibody | anti-NOS1 antibody

NOS1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326195	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

NOS1; Polyclonal Antibody; NOS1 Antibody; 2310005C01Rik; BNOS; Constitutive NOS; EC 1.14.13.39; IHPS 1; IHPS1; N-NOS; NC-NOS; neuronal Nitric Oxide Synthase; Neuronal NOS; Nitric oxide synthase; neuronal; included; Nitric oxide synthase 1 (neuronal); Nitric oxide synthase 1; brain; penile neuronal; NNOS; NO; NOS 1; NOS; NOS type I; NOS-I; NOS1_HUMAN; Peptidyl-cysteine S-nitrosylase NOS1; anti-NOS1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	NOS1 antibody detects endogenous levels of total NOS1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1434
Applicable Applications for anti-NOS1 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human NOS1
Subcellular Location	Cell Membrane > Sarcolemma. Cell Projection > Dendritic Spine. In skeletal muscle, it is localized beneath the sarcolemma of fast-twitch muscle fiber by associating with the dystrophin glycoprotein complex. In neurons, enriched in dendritic spines.
Tissue Specificity	Isoform 1 is ubiquitously expressed: detected in skeletal muscle and brain, also in testis, lung and kidney, and at low levels in heart, adrenal gland and retina. Not detected in the platelets. Isoform 3 is expressed only in testis. Isoform 4 is detected in testis, skeletal muscle, lung, and kidney, at low levels in the brain, but not in the heart and adrenal gland.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of Huvec whole cell lysates, using NOS1 Antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA326195 at 1/100 staining Human liver cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-NOS1 antibody

Description: Nitric Oxide Synthase (NOS) catalyses the formation of nitric oxide (NO) and citruline from L-arginine, oxygen and cofactors. Three family members have been characterized: neuronal NOS (nNOS), which is found primarily in neuronal tissue; inducible NOS (iNOS), which is induced by interferon gamma and lipopolysaccharides in the kidney and cardiovascular system; and endothelial NOS (eNOS), which is expressed in blood vessels (1). NO is a messenger molecule with diverse functions throughout the body including the maintenance of vascular integrity, homeostasis, synaptic plasticity, long-term potentiation, learning, and memory (2, 3). nNOS binds selectively to the second PDZ domain of PSD-95, and the enzymatic activity of nNOS is either downregulated by phosphorylation at Ser847 by CaM-KII or stimulated by calcium influxes governed by the NMDA receptor channels (4-5).
Function: Produces nitric oxide (NO) which is a messenger molecule with diverse functions throughout the body. In the brain and peripheral nervous system, NO displays many properties of a neurotransmitter. Probably has nitrosylase activity and mediates cysteine S-nitrosylation of cytoplasmic target proteins such SRR.
Subunit Structure: Homodimer. Interacts with DLG4; the interaction possibly being prevented by the association between NOS1 and CAPON. Forms a ternary complex with CAPON and RASD1. Forms a ternary complex with CAPON and SYN1. Interacts with ZDHHC23. Interacts with NOSIP; which may impair its synaptic location (By similarity). Interacts with HTR4. Interacts with VAC14 (By similarity). Interacts with SLC6A4 (By similarity). Interacts (via N-terminal domain) with DLG4 (via N-terminal tandem pair of PDZ domains) (By similarity).
Post-translational Modifications: Ubiquitinated; mediated by STUB1/CHIP in the presence of Hsp70 and Hsp40 (in vitro).
Similarity: The PDZ domain in the N-terminal part of the neuronal isoform participates in protein-protein interaction, and is responsible for targeting nNos to synaptic membranes in muscles. Mediates interaction with VAC14 (By similarity). Belongs to the NOS family.

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	Observed: 160 kDa Predicted: 161 kDa
NCBI Official Full Name	nitric oxide synthase, brain isoform 1
NCBI Official Synonym Full Names	nitric oxide synthase 1
NCBI Official Symbol	NOS1
NCBI Official Synonym Symbols	NOS; bNOS; nNOS; IHPS1; N-NOS; NC-NOS
NCBI Protein Information	nitric oxide synthase, brain
UniProt Protein Name	Nitric oxide synthase, brain
UniProt Gene Name	NOS1

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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/nos1-antibody-immunohistochemistry-western-blot-elisa/326195>