

Rabbit nNOS Polyclonal Antibody | anti-nNOS antibody

Phospho-nNOS (Ser1417) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329778	Rabbit	Human, Mouse, RatPredicted Reactivity: Pig (100%), Zebrafish (91%), Horse (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

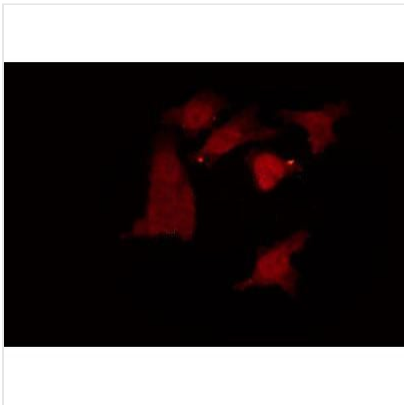
nNOS; Polyclonal Antibody; Phospho-nNOS (Ser1417) Antibody; 2310005C01Rik; BNOS; Constitutive NOS; EC 1.14.13.39; IHPS 1; IHPS1; N-NOS; NC-NOS; neuronal Nitric Oxide Synthase; Neuronal NOS; Nitric oxide synthase; neuronal; included; Nitric oxide synthase 1 (neuronal); Nitric oxide synthase 1; brain; penile neuronal; NNOS; NO; NOS 1; NOS; NOS type I; NOS-I; NOS1; NOS1_HUMAN; Peptidyl-cysteine S-nitrosylase NOS1; anti-nNOS antibody

PRODUCT SPECIFICATIONS

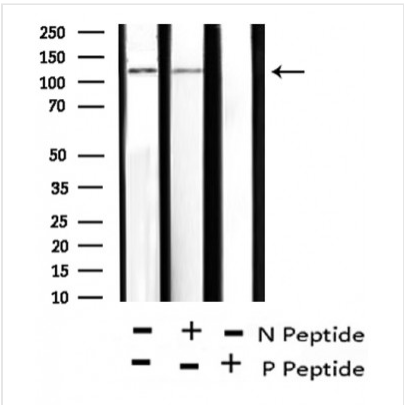
Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Zebrafish (91%), Horse (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-nNOS (Ser1417) Antibody detects endogenous levels of nNOS only when phosphorylated at Ser1417. 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.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-nNOS antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human nNOS around the phosphorylation site of Ser1417.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Ubiquitinated; mediated by STUB1/CHIP in the presence of Hsp70 and Hsp40 (in vitro).
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).
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.

Subcellular Location	Cell membrane>Sarcolemma>Peripheral membrane protein. Cell projection>Dendritic spine. Note: 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 (By similarity).
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)
Staining A549 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)
Western blot analysis nNOS (Phospho-Ser1417) using HepG2 whole cell lysates.-/+ means absence or presence of N peptide¼non-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-nNOS antibody	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.
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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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/nnos-antibody-peptide-elisa-immunocytochemistry-immunofluorescence-western-blot-elisa/329778>