

Anti-nNOS Antibody

Catalog # AP95413

Product Information

Application	WB, IHC, FC, IP, IF/IC
Primary Accession	P29475
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	160970

Additional Information

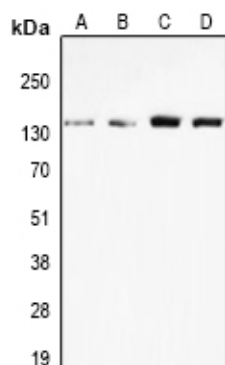
Gene ID	4842
Other Names	Nitric oxide synthase, brain; Constitutive NOS; NC-NOS; NOS type I; Neuronal NOS; N-NOS; nNOS; Peptidyl-cysteine S-nitrosylase NOS1; bNOS
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human nNOS. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~1:10~50 IP~~N/A IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

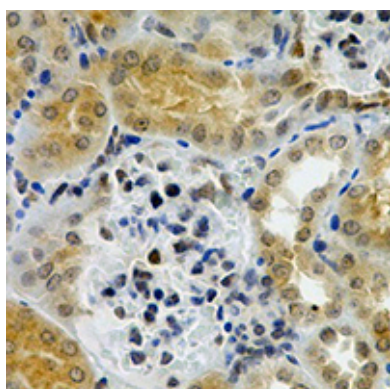
Name	NOS1 (HGNC:7872)
Function	Produces nitric oxide (NO) which is a messenger molecule with diverse functions throughout the body. In the brain and peripheral nervous system, NO displays many properties of a neurotransmitter. Probably has nitrosylase activity and mediates cysteine S-nitrosylation of cytoplasmic target proteins such SRR.
Cellular Location	Cell membrane, sarcolemma {ECO:0000250 UniProtKB:Q9Z0J4}; Peripheral membrane protein. Cell projection, dendritic spine {ECO:0000250 UniProtKB:P29476}. Note=In skeletal muscle, it is localized beneath the sarcolemma of fast-twitch muscle fiber by associating with the dystrophin glycoprotein complex (By similarity) In neurons, enriched in dendritic spines (By similarity) {ECO:0000250 UniProtKB:P29476, ECO:0000250 UniProtKB:Q9Z0J4}
Tissue Location	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

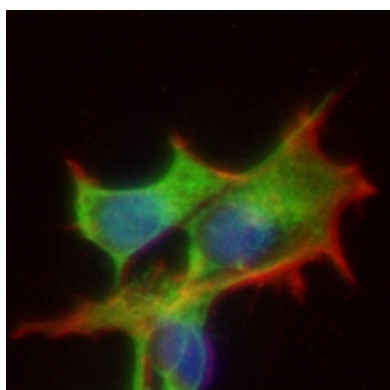
Images



Western blot analysis of nNOS expression in HeLa (A), Raw264.7 (B), mouse brain (C), PC12 (D), rat brain (E) whole cell lysates. (Predicted band size: 160 kD; Observed band size: 160 kD)



Immunohistochemical analysis of nNOS staining in mouse kidney formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of nNOS staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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