

nNOS (phospho Ser852) Polyclonal Antibody

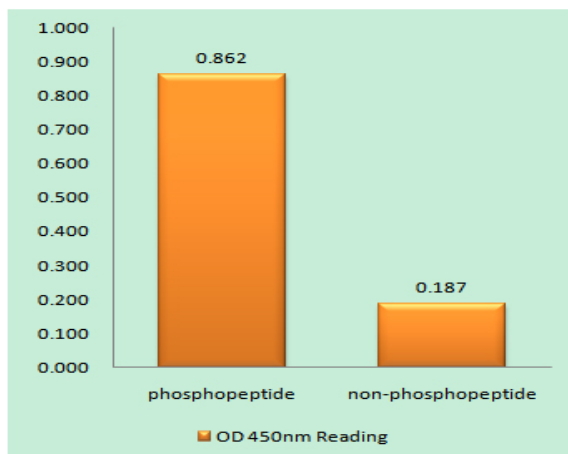
Catalog No :	YP0195
Reactivity :	Human;Mouse;Rat;Monkey
Applications :	WB;IHC;IF;ELISA
Target :	NOS1/nNOS
Fields :	>>Arginine biosynthesis;>>Arginine and proline metabolism;>>Metabolic pathways;>>Calcium signaling pathway;>>Phagosome;>>Apelin signaling pathway;>>Circadian entrainment;>>Long-term depression;>>Relaxin signaling pathway;>>Salivary secretion;>>Alzheimer disease;>>Amyotrophic lateral sclerosis;>>Pathways of neurodegeneration - multiple diseases
Gene Name :	NOS1
Protein Name :	Nitric oxide synthase brain
Human Gene Id :	4842
Human Swiss Prot No :	P29475
Mouse Gene Id :	18125
Mouse Swiss Prot No :	Q9Z0J4
Rat Gene Id :	24598
Rat Swiss Prot No :	P29476
Immunogen :	The antiserum was produced against synthesized peptide derived from human n-NOS around the phosphorylation site of Ser852. AA range:818-867
Specificity :	Phospho-NOS1 (S852) Polyclonal Antibody detects endogenous levels of NOS1 protein only when phosphorylated at S852.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	130-160kD
Cell Pathway :	Arginine and proline metabolism;Calcium;Long-term depression;Alzheimer's disease;Amyotrophic lateral sclerosis (ALS);
Background :	<p>The protein encoded by this gene belongs to the family of nitric oxide synthases, which synthesize nitric oxide from L-arginine. Nitric oxide is a reactive free radical, which acts as a biologic mediator in several processes, including neurotransmission, and antimicrobial and antitumoral activities. In the brain and peripheral nervous system, nitric oxide displays many properties of a neurotransmitter, and has been implicated in neurotoxicity associated with stroke and neurodegenerative diseases, neural regulation of smooth muscle, including peristalsis, and penile erection. This protein is ubiquitously expressed, with high level of expression in skeletal muscle. Multiple transcript variants that differ in the 5' UTR have been described for this gene but the full-length nature of these transcripts is not known. Additionally, alternatively spliced transcript variants encoding different isoforms</p>
Function :	<p>alternative products:Isoform 3 is produced by different alternative splicing events implicating either the untranslated exons TEX1 (TN-NOS) or TEX1B (TN-NOSB) leading to a N-terminus truncated protein which possesses enzymatic activity comparable to that of isoform 1. The C-terminal truncated isoform 4 is produced by insertion of the TEX2 exon between exons 3 and 4 of isoform 1, leading to a frameshift and a premature stop codon,catalytic activity:L-arginine + n NADPH + n H(+) + m O(2) = citrulline + nitric oxide + n NADP(+).,cofactor:Binds 1 FAD.,cofactor:Binds 1 FMN.,cofactor:Heme group.,cofactor:Tetrahydrobiopterin (BH4). May stabilize the dimeric form of the enzyme.,disease:Genetic variations in NOS1 gene are associated with susceptibility to infantile hypertrophic pyloric stenosis type 1 (IHPS1) [MIM:179010]. IHPS has an incidence of 1-5 per 1'000 live births in whites and a marked</p>
Subcellular Location :	Cell membrane, sarcolemma; Peripheral membrane protein. 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 (By similarity). .

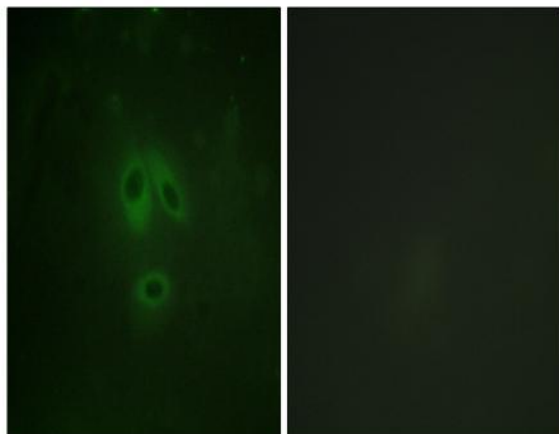
Expression :

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.

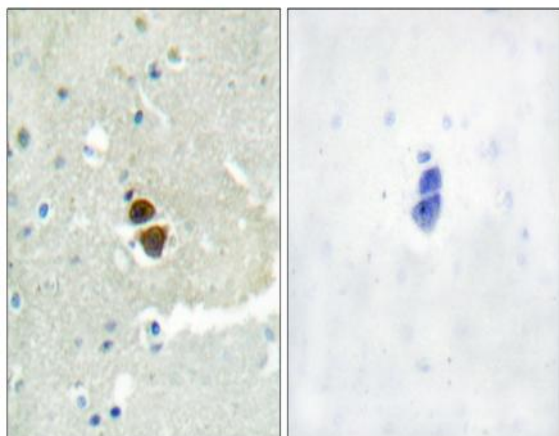
Products Images



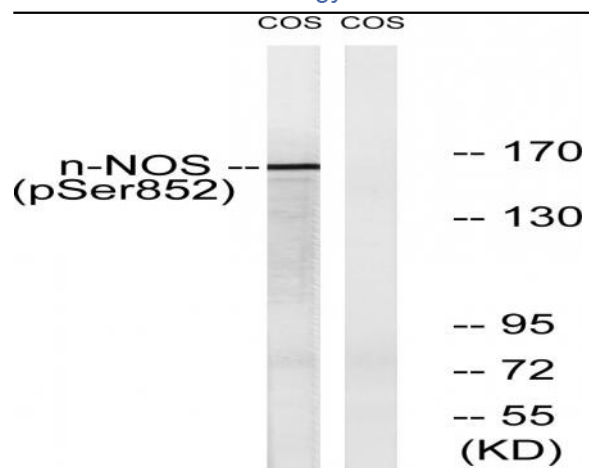
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using n-NOS (Phospho-Ser852) Antibody



Immunofluorescence analysis of HeLa cells, using n-NOS (Phospho-Ser852) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using n-NOS (Phospho-Ser852) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from A549 cells, using n-NOS (Phospho-Ser852) Antibody. The lane on the right is blocked with the phospho peptide.