



Rabbit Anti-phospho-nNOS (Ser1417) antibody

SL19301R

Product Name:	phospho-nNOS (Ser1417)
Chinese Name:	磷酸化一氧化氮合成酶-1(神经型)抗体
Alias:	nNOS (neuronal) (phospho S1417); p-nNOS (neuronal) (phospho S1417); 2310005C01Rik; bNOS; Constitutive NOS; EC 1.14.13.39; IHPS 1; IHPS1; N NOS; N-NOS; NC NOS; NC-NOS; neuronal Nitric Oxide Synthase; Neuronal NOS; Nitric oxide synthase , neuronal, included; Nitric oxide synthase 1 (neuronal); Nitric oxide synthase 1; Nitric oxide synthase brain; Nitric oxide synthase, brain; Nitric oxide synthase, penile neuronal, included; nNOS; NO; NOS 1; NOS; NOS type I; NOS-I; NOS1; NOS1_HUMAN; Peptidyl-cysteine S-nitrosylase NOS1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Zebrafish,Xenopus laevis
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	160kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human nNOS around the phosphorylation site of Ser1417:SE(p-S)IA
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed:[PubMed](#)

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 (some testis-specific) have been found for this gene.[provided by RefSeq, Feb 2011]

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.

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.

Post-translational modifications:

Ubiquitinated; mediated by STUB1/CHIP in the presence of Hsp70 and Hsp40 (in vitro).

Similarity:

Belongs to the NOS family.
Contains 1 FAD-binding FR-type domain.
Contains 1 flavodoxin-like domain.
Contains 1 PDZ (DHR) domain.

SWISS:

P55211

Gene ID:

4842

Product Detail:

Database links:

[Entrez Gene: 4842](#) Human

[Entrez Gene: 18125](#) Mouse

[Entrez Gene: 100009243](#) Rabbit

[Entrez Gene: 24598](#) Rat

[Entrez Gene: 60658](#) Zebrafish

[Omim: 163731](#) Human

[SwissProt: P29475](#) Human

[SwissProt: Q9Z0J4](#) Mouse

[SwissProt: O19132](#) Rabbit

[SwissProt: P29476](#) Rat

[Unigene: 654410](#) Human

[Unigene: 684465](#) Human

[Unigene: 684466](#) Human

[Unigene: 684467](#) Human

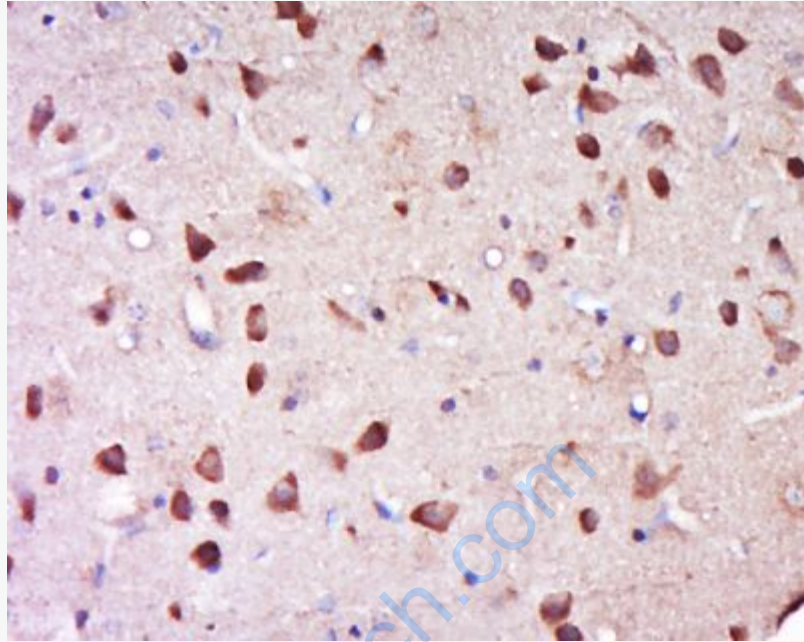
[Unigene: 442195](#) Mouse

[Unigene: 44249](#) Mouse

[Unigene: 10573](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-phospho-nNOS (Ser1417) Polyclonal Antibody, Unconjugated(SL19301R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining