

产品名称: NOS1 Rabbit Polyclonal Antibody

产品货号: APRab14802

产品概述 (Summary)

描述(Description)	Rabbit polyclonal Antibody
宿主(Host)	Rabbit
应用(Application)	WB,IHC,ICC/IF,ELISA
种属反应(Reactivity)	Human,Mouse,Rat
偶联物(Conjugation)	Unconjugated
修饰(Modification)	Unmodified
同种型(Isotype)	IgG
克隆(Clonality)	Polyclonal
剂型(Form)	Liquid
保存条件(Storage)	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液(Buffer)	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
纯化 (Purification)	Affinity purification

产品应用(Application)

稀释比(Dilution Ratio)	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000
分子量(Molecular Weight)	130-160kDa

抗原信息(Antigen Information)

基因名(Gene Name)	NOS1
别名(Alternative Names)	NOS1; Nitric oxide synthase; brain; Constitutive NOS; NC-NOS; NOS type I; Neuronal NOS; N-NOS; nNOS; Peptidyl-cysteine S-nitrosylase NOS1; bNOS
基因 ID(Gene ID)	4842.0
SwissProt ID	P29475
免疫原(Immunogen)	The antiserum was produced against synthesized peptide derived from human nNOS. AA range:818-867

研究背景 (Background)

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/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: $\text{L-arginine} + n \text{ NADPH} + n \text{ H}^{(+)} + m \text{ O}_2 = \text{citrulline} + \text{nitric oxide} + n \text{ NADP}^{(+)}.$ 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 preponderance of males to females (4:1). IHPS is the most frequent disorder requiring surgery in the first year of life. The disorder is characterized by hypertrophy and hyperplasia of the circular muscle layer of the pylorus, leading to persistent vomiting 2-12 weeks after birth. Defective pyloric relaxation and increased pyloric smooth muscle mass have been suggested to be responsible for gastric-outlet obstruction, domain: 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, enzyme regulation: Stimulated by calcium/calmodulin. Inhibited by n-Nos-inhibiting protein (PIN) which may prevent the dimerization of the protein. Inhibited by NOSIP, 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, online information: Nitric oxide synthase entry, similarity: Belongs to the NOS family, similarity: Contains 1 FAD-binding FR-type domain, similarity: Contains 1 flavodoxin-like domain, similarity: Contains 1 PDZ (DHR) domain, subcellular location: 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, subunit: 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, 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.,

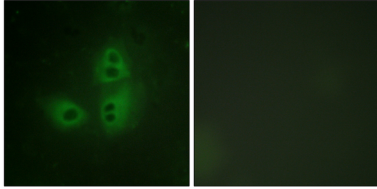
研究领域 (Research Area)

Arginine and proline metabolism; Calcium; Long-term depression; Alzheimer's disease; Amyotrophic lateral sclerosis (ALS);

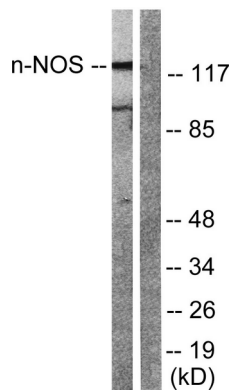
注意事项 (Note)

For research use only.

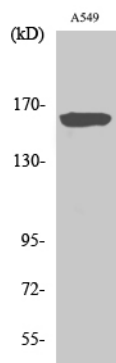
图片 (Image Data)



Immunofluorescence analysis of HeLa cells, using nNOS Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from Raw264.7 cells, treated with INF 2500u/ml 10', using nNOS Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using NOS1 Polyclonal Antibody diluted at 1:500

EnkiLife 优势产品推荐

产品类别	产品货号	产品名称
WB 解决方案	RA10020	2h 极速 WB 即用型全流程试剂盒
	RA10021	4h 快速 WB 即用型全流程试剂盒
	RA10042	5h 畅享版 WB 全流程试剂盒
	RA10037	校准级彩色预染蛋白 Marker (8-180kDa)
	RA10038	校准级彩色预染蛋白 Marker (10-250kDa)
	RA10039	校准级高分子彩色预染蛋白 Marker (25-400kDa)
TSA 多重荧光染色试剂盒	RA10008	TSA 双标三色多重荧光染色试剂盒 (mIHC)
	RA10009	TSA 三标四色多重荧光染色试剂盒 (mIHC)
	RA10010	TSA 四标五色多重荧光染色试剂盒 (mIHC)
	RA10011	TSA 五标六色多重荧光染色试剂盒 (mIHC)
	RA10012	TSA 六标七色多重荧光染色试剂盒 (mIHC)
IHC 检测试剂盒	RA10006	HRP Anti-Mouse/Rabbit IHC Detection System
	RA10007	Polymer-HRP Anti-Mouse/Rabbit IHC Detection System
抗体标记试剂盒	RE80004p	辣根过氧化物酶(HRP)抗体标记试剂盒
	RE80002q	Sulfo-NHS-生物素标记试剂盒
	RE80007p	Cy3 荧光素标记试剂盒
	RE80011p	Fluor488 荧光素标记试剂盒
	RE80017p	Fluor750 荧光素标记试剂盒
	RE80005p	藻红蛋白(R-PE) 抗体快速标记试剂盒
	RE80040	PE-Cy7 串联染料抗体快速标记试剂盒
稳转细胞系构建服务 (免费赠送全膜 WB 验证)	TS-0001	过表达稳转细胞系构建
	TS-0002	敲低稳转细胞系构建
	TS-0003	敲除细胞系构建

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