

Datasheet for ABIN3044371
anti-NOS1 antibody (C-Term)

2 Images

15 Publications



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Overview

Quantity:	100 µg
Target:	NOS1
Binding Specificity:	AA 1418-1434, C-Term
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This NOS1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Purpose:	Rabbit IgG polyclonal antibody for Nitric oxide synthase, brain(NOS1) detection. Tested with WB, IHC-P in Human,Mouse,Rat.
Immunogen:	A synthetic peptide corresponding to a sequence at the C-terminus of human nNOS(neuronal)(1418-1434aa IAFIEESKKDTDEVFSS), identical to the related mouse and rat sequences.
Sequence:	IAFIEESKKD TDEVFSS
Isotype:	IgG
Cross-Reactivity (Details):	Predicted Cross Reactivity: mouse No cross reactivity with other proteins. Predicted Cross Reactivity: Species predicted to be fit for the product based on sequence similarities.

Product Details

Characteristics: Rabbit IgG polyclonal antibody for Nitric oxide synthase, brain(NOS1) detection. Tested with WB, IHC-P in Human,Mouse,Rat.
Gene Name: nitric oxide synthase 1(neuronal)
Protein Name: Nitric oxide synthase, brain

Purification: Immunogen affinity purified.

Target Details

Target: NOS1

Alternative Name: NOS1 ([NOS1 Products](#))

Background: Nitric oxide synthase 1 (neuronal), also known as NOS1, is an enzyme that in humans is encoded by the NOS1 gene. 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.

Synonyms: 2310005C01Rik antibody|bNOS antibody|Constitutive NOS antibody|EC 1.14.13.39 antibody|IHPS 1 antibody|IHPS1 antibody|N NOS antibody|N-NOS antibody|NC NOS antibody|NC-NOS antibody|neuronal Nitric Oxide Synthase antibody|Neuronal NOS antibody|Nitric oxide synthase, neuronal, included antibody|Nitric oxide synthase 1(neuronal) antibody|Nitric oxide synthase 1 antibody|Nitric oxide synthase brain antibody|Nitric oxide synthase, brain antibody|Nitric oxide synthase, penile neuronal, included antibody|nNOS antibody|NO antibody|NOS 1 antibody|NOS antibody|NOS type I antibody|NOS-I antibody|NOS1 antibody|NOS1_HUMAN antibody|Peptidyl-cysteine S-nitrosylase NOS1 antibody

UniProt: [P29475](#)

Pathways: [Negative Regulation of Hormone Secretion, Myometrial Relaxation and Contraction](#)

Application Details

Application Notes: WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Rat, Predicted Species: Mouse
IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Rat, Predicted Species: Human, Mouse,
Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.
Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities. Other applications have not been tested.
Optimal dilutions should be determined by end users.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg Thimerosal, 0.05 mg Sodium azide.

Preservative: Thimerosal (Merthiolate), Sodium azide

Precaution of Use: This product contains Sodium azide and Thimerosal (Merthiolate): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

Handling Advice: Avoid repeated freezing and thawing.

Storage: 4 °C/-20 °C

Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.
It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Expiry Date: 12 months

Publications

Product cited in: Yin, Liang, Wang, Yan, Yin, Wu, Su: "Naringenin induces laxative effects by upregulating the expression levels of c-Kit and SCF, as well as those of aquaporin 3 in mice with loperamide-induced constipation." in: **International journal of molecular medicine**, Vol. 41, Issue 2, pp. 649-

658, (2018) ([PubMed](#)).

Ding, Tang, Tang, Zhang, Wang: "A Variant in the Precursor of MicroRNA-146a is Responsible for Development of Erectile Dysfunction in Patients with Chronic Prostatitis via Targeting NOS1." in: **Medical science monitor : international medical journal of experimental and clinical research**, Vol. 23, pp. 929-937, (2017) ([PubMed](#)).

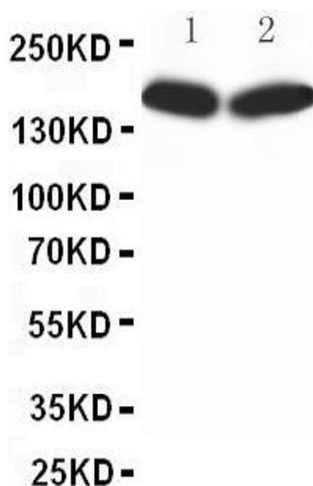
Zheng, Sulieman, Li, Wei, Xu, Shi: "Nitric oxide and thyroid hormone receptor alpha 1 contribute to ovarian follicular development in immature hyper- and hypo-thyroid rats." in: **Reproductive biology**, Vol. 15, Issue 1, pp. 27-33, (2015) ([PubMed](#)).

Kong, Wei, Fedail, Shi, Nagaoka, Watanabe: "Effects of thyroid hormones on the antioxidative status in the uterus of young adult rats." in: **The Journal of reproduction and development**, Vol. 61, Issue 3, pp. 219-27, (2015) ([PubMed](#)).

Li, Zhou, Wei, Huang, Shi: "Cell-specific expression and immunolocalization of nitric oxide synthase isoforms and soluble guanylyl cyclase α and β subunits in postnatal porcine uteri." in: **Acta histochemica**, Vol. 116, Issue 3, pp. 466-73, (2014) ([PubMed](#)).

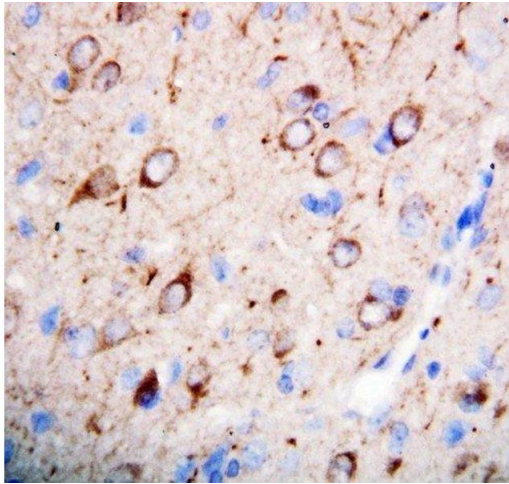
There are more publications referencing this product on: [Product page](#)

Images



Western Blotting

Image 1. Anti-nNOS(neuronal) antibody, Western blotting All lanes: Anti nNOS(neuronal) at 0.5ug/ml Lane 1: Rat Brain Tissue Lysate at 50ug Lane 2: MCF-7 Whole Cell Lysate at 40ug Predicted bind size: 160KD Observed bind size: 160KD



Immunohistochemistry

Image 2. Anti-nNOS(neuronal) antibody, IHC(P) IHC(P): Rat Brain Tissue