# abcam

### Product datasheet

## Anti-nNOS (neuronal) antibody ab3511

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概述

产品名称 Anti-nNOS (neuronal)抗体

描述 兔多克隆抗体to nNOS (neuronal)

宿主 Rabbit

特异性 Detects nNOS from bovine, mouse, rabbit and rat tissues. This antibody does not detect

endothelial NOS (eNOS) or inducible NOS (iNOS).

经测试应用 适用于: IHC-Fr, WB, IHC-P, ICC/IF, IP

种属反应性 与反应: Mouse, Rat, Rabbit, Guinea pig, Cow, Human

免疫原 Synthetic peptide corresponding to Rat nNOS (neuronal) aa 700-800.

阳性对照 WB: Mouse and rat brain tissue lysate. IHC-P: Mouse skeletal muscle tissue, rat cerebellum

tissue. IHC-Fr: Rat brain tissue. ICC/IF: SH-SY5Y cells.

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液 Constituent: 100% Whole serum

纯**度** Whole antiserum

**克隆** 多克隆

**同种型** IgG

应用

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#### The Abpromise guarantee

#### Abpromise™承诺保证使用ab3511于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-Fr		1/800.
WB		1/1000.
IHC-P		1/200 - 1/400.
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.

功能	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.
组织 <b>特异性</b>	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.
序列相似性	Belongs to the NOS family.  Contains 1 FAD-binding FR-type domain.  Contains 1 flavodoxin-like domain.  Contains 1 PDZ (DHR) domain.
结 <b>构域</b>	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. Mediates interaction with VAC14.

翻译后修饰

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

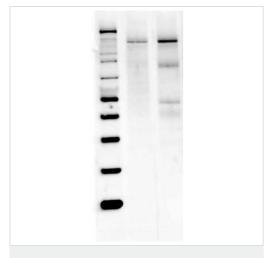
细胞定位

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.

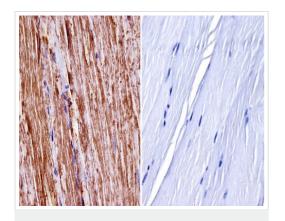
#### 图片

靶标



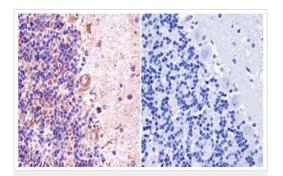
Western blot - Anti-nNOS (neuronal) antibody (ab3511)

Western blot analysis of nNOS was performed by loading  $40\mu g$  of Mouse (Lane 1) and Rat Brain (Lane 2) tissue lysate onto a 4-12% Bis-Tris polyacrylamide gel. Proteins were transferred to a Nitrocellulose membrane. Membranes were probed with a rabbit polyclonal antibody (ab3511) recognizing nNOS at a dilution of 1:1000.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-nNOS (neuronal) antibody (ab3511)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse skeletal muscle tissue sections labeling nNOS (neuronal) with ab3511 at 1/400 (left). Antigen retrieval was performed using 10M sodium citrate (pH 6.0) buffer, microwaved for 8-15 minutes. Tissues were blocked in 3% BSA in PBS for 30 minutes at room temperature. A biotin-conjugated secondary antibody was used. Right - negative control.



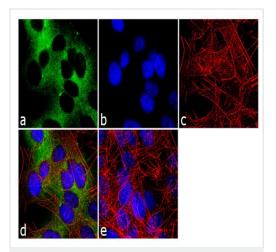
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-nNOS (neuronal) antibody (ab3511)

Immunohistochemistry was performed on normal biopsies of deparaffinized Rat cerebellum tissue. To expose target proteins heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer and microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1:200 with a Rabbit Polyclonal Antibody recognizing nNOS (ab3511) or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.



Immunohistochemistry (Frozen sections) - AntinNOS (neuronal) antibody (ab3511)

ab3511 at 1/800 dilution staining nNOS (neuronal) in rat brain tissue section by immunohistochemistry (Frozen sections).



Immunocytochemistry/ Immunofluorescence - AntinNOS (neuronal) antibody (ab3511)

Immunofluorescence analysis of nNOS was done on 70% confluent log phase SH-SY5Y cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with nNOS Rabbit Polyclonal Antibody (ab3511) at 1/250 dilution in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Rabbit lgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate at a dilution of 1/2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI. F-actin (Panel c: red) was stained with Rhodamine Phalloidin (1/300 dilution). Panel d is a merged image showing cytoplasmic localization. Panel e is a no primary antibody control. The images were captured at 60X magnification.

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