


# Anti-nNOS (neuronal) antibody [EP1855Y] - Low endotoxin, Azide free ab219373

**重组** RabMAb

**13 References** **8 图像**

### 概述

产品名称	Anti-nNOS (neuronal)抗体[EP1855Y] - Low endotoxin, Azide free
描述	兔单克隆抗体[EP1855Y] to nNOS (neuronal) - Low endotoxin, Azide free
宿主	Rabbit
经测试应用	<b>适用于:</b> ICC/IF, Flow Cyt (Intra), IP, WB <b>不适用于:</b> IHC-P
种属反应性	<b>与反应:</b> Mouse, Rat <b>预测可用于:</b> Human, Common marmoset 
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: Mouse brain tissue lysate. ICC/IF: PC-12 cells Flow Cyt (intra): PC-12 cells. IP: Rat brain tissue lysate.
常规说明	<p>ab219373 is the carrier-free version of <a href="#">ab76067</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p>

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

Our **Low endotoxin, azide-free formats** have low endotoxin level ( $\leq 1$  EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

## 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.20 Constituent: PBS
无载体	是
纯度	Protein A purified
克隆	单克隆
克隆编号	EP1855Y
同种型	IgG

## 应用

**The Abpromise guarantee**      **Abpromise<sup>™</sup>** 承诺保证使用 ab219373 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
ICC/IF		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration. <b>ab199376</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration.

**应用说明**      Is unsuitable for IHC-P.

## 靶标

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.
组织特异性	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.

#### 结构域

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.

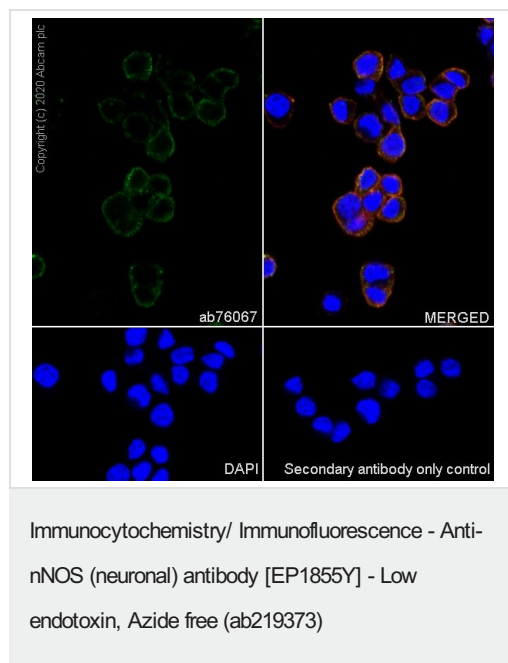
#### 翻译后修饰

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

#### 细胞定位

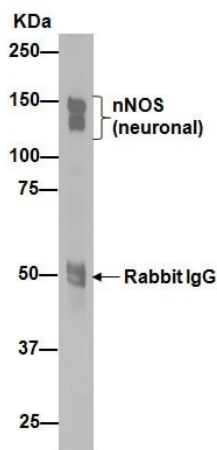
Cell membrane > sarcolemma. Cell projection > dendritic spine. In skeletal muscle, it is localized beneath the sarcolemma of fast-twitch muscle fiber by associating with the dystrophin glycoprotein complex. In neurons, enriched in dendritic spines.

#### 图片



Immunocytochemistry analysis of PC-12 cells labelling nNOS (neuronal) (green) with purified [ab76067](#) at 1/250. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. [ab150077](#), an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. Cells were counterstained with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) ([ab195889](#)) at 1/200 dilution (red). Nuclear DNA was labelled with DAPI (blue).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab76067](#)).



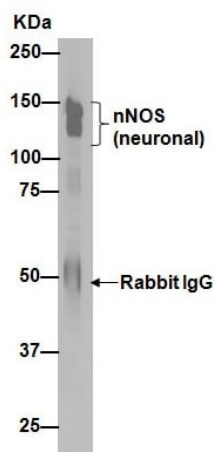
Immunoprecipitation - Anti-nNOS (neuronal) antibody  
[EP1855Y] - Low endotoxin, Azide free (ab219373)

**ab76067** (purified) at 1/150 immunoprecipitating nNOS (neuronal) in rat brain tissue lysate. For western blotting, a peroxidase-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/1000).

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76067**).



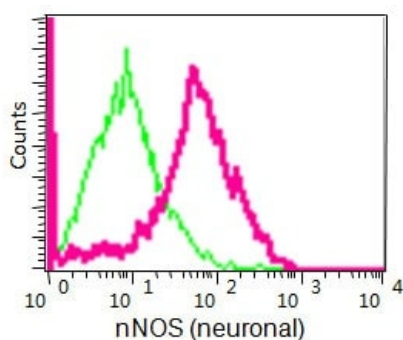
Immunoprecipitation - Anti-nNOS (neuronal) antibody  
[EP1855Y] - Low endotoxin, Azide free (ab219373)

**ab76067** (unpurified) at 1/4 immunoprecipitating nNOS (neuronal) in rat brain tissue lysate. For western blotting, a peroxidase-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/1000).

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

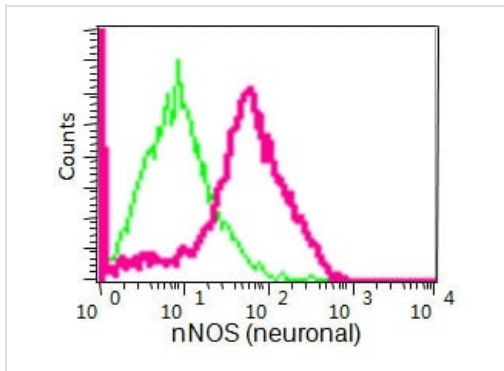
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76067**).



Flow Cytometry (Intracellular) - Anti-nNOS (neuronal) antibody [EP1855Y] - Low endotoxin, Azide free (ab219373)

Intracellular Flow Cytometry analysis of PC-12 cells labelling nNOS (neuronal) with purified **ab76067** at 1/600 (red). Cells were fixed with 100% methanol. A FITC-conjugated goat anti-rabbit IgG (1/150) was used as the secondary antibody. Green - Isotype control, rabbit monoclonal IgG.

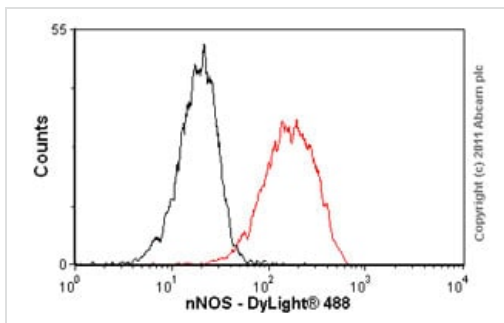
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76067**).



Flow Cytometry (Intracellular) - Anti-nNOS (neuronal)  
antibody [EP1855Y] - Low endotoxin, Azide free  
(ab219373)

Intracellular Flow Cytometry analysis of PC-12 cells labelling nNos (neuronal) with unpurified **ab76067** at 1/15 (red). Cells were fixed with 100% methanol. A FITC-conjugated goat anti-rabbit IgG (1/150) was used as the secondary antibody. Green - Isotype control, rabbit monoclonal IgG.

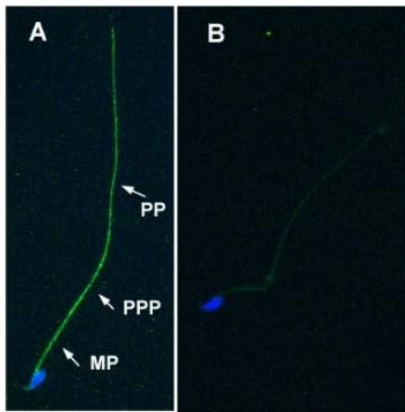
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76067**).



Flow Cytometry (Intracellular) - Anti-nNOS (neuronal)  
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Overlay histogram showing PC-12 cells stained with unpurified **ab76067** (red line). The cells were fixed with methanol (5 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (unpurified **ab76067**, 1/50 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (**ab96899**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit monoclonal IgG (1µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a slightly decreased signal in PC-12 cells fixed with 4% paraformaldehyde (10 min) used under the same conditions. Please note that Abcam do not have any data for use of this antibody in non-fixed cells. We welcome any customer feedback.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76067**).



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Immunocytochemistry/ Immunofluorescence - Anti-nNOS (neuronal) antibody [EP1855Y] - Low endotoxin, Azide free (ab219373)

This image is courtesy of an Abreview submitted by Patricia Martin-DeLeon.

Unpurified **ab76067** staining nNOS (neuronal) in murine sperm cells by Immunocytochemistry/ Immunofluorescence. Cells were fixed with paraformaldehyde and blocked using 2% BSA. Samples were then incubated with undiluted **ab76067**. The secondary used was a FITC conjugated goat anti-rabbit IgG at a 1/400 dilution. Panel A shows the specific staining of nNOS in sperm while Panel B is the control sample treated with Rabbit IgG.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76067**).

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

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