


Product datasheet

Anti-nNOS (neuronal) antibody [EP1855Y] ab76067

Recombinant RabMAb

★★★★★ [10 Abreviews](#) [63 References](#) [10 Images](#)

Overview

Product name	Anti-nNOS (neuronal) antibody [EP1855Y]
Description	Rabbit monoclonal [EP1855Y] to nNOS (neuronal)
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IP, ICC/IF Unsuitable for: IHC-P
Species reactivity	Reacts with: Mouse, Rat Predicted to work with: Human, Common marmoset 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse brain tissue lysate. ICC/IF: PC-12 cells. Flow Cyt (intra): PC-12 cells. IP: Rat brain tissue lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EP1855Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab76067 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

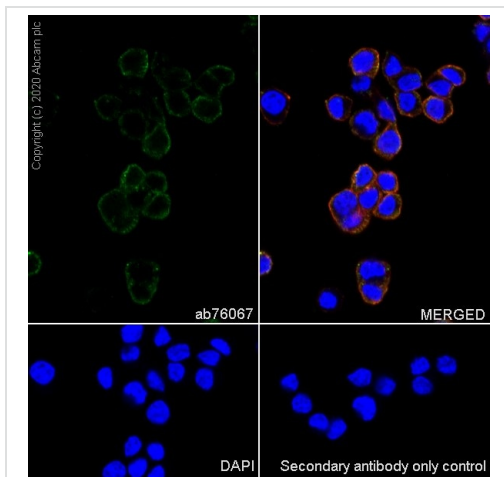
Application	Abreviews	Notes
Flow Cyt (Intra)		1/600. For unpurified use at 1/15. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (6)	1/1000 - 1/2000. Predicted molecular weight: 161 kDa. For unpurified use at 1/100.
IP		1/150. For unpurified use at 1/4.
ICC/IF	★★★★★ (1)	1/200.

Application notes Is unsuitable for IHC-P.

Target

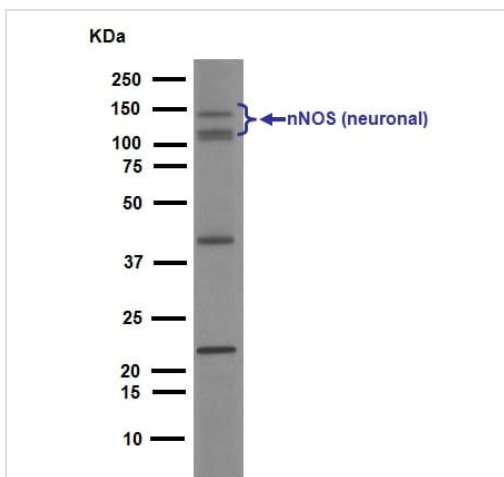
Function	Produces nitric oxide (NO) which is a messenger molecule with diverse functions throughout the body. In the brain and peripheral nervous system, NO displays many properties of a neurotransmitter. Probably has nitrosylase activity and mediates cysteine S-nitrosylation of cytoplasmic target proteins such SRR.
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.
Sequence similarities	Belongs to the NOS family. Contains 1 FAD-binding FR-type domain. Contains 1 flavodoxin-like domain. Contains 1 PDZ (DHR) domain.
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. Mediates interaction with VAC14.
Post-translational modifications	Ubiquitinated; mediated by STUB1/CHIP in the presence of Hsp70 and Hsp40 (in vitro).
Cellular localization	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.

Images



Immunocytochemistry/ Immunofluorescence - Anti-nNOS (neuronal) antibody [EP1855Y] (ab76067)

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).



Western blot - Anti-nNOS (neuronal) antibody [EP1855Y] (ab76067)

Anti-nNOS (neuronal) antibody [EP1855Y] (ab76067) at 1/100 dilution (unpurified) + Mouse brain tissue lysate at 10 µg

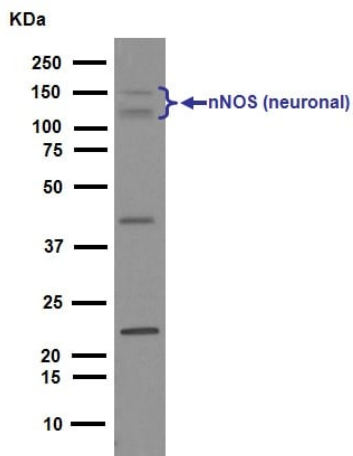
Secondary

Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 161 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



Western blot - Anti-nNOS (neuronal) antibody [EP1855Y] (ab76067)

Anti-nNOS (neuronal) antibody [EP1855Y] (ab76067) at 1/3000 dilution (purified) + Mouse brain tissue lysate at 10 µg

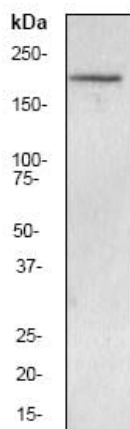
Secondary

Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 161 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



Western blot - Anti-nNOS (neuronal) antibody [EP1855Y] (ab76067)

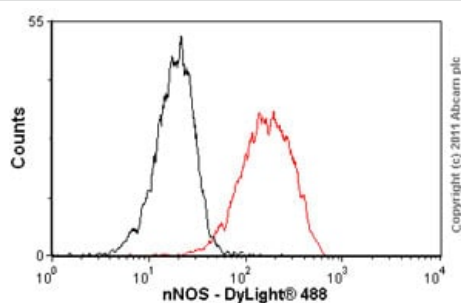
Anti-nNOS (neuronal) antibody [EP1855Y] (ab76067) at 1/1000 dilution (unpurified) + Mouse brain tissue lysate at 10 µg

Secondary

HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

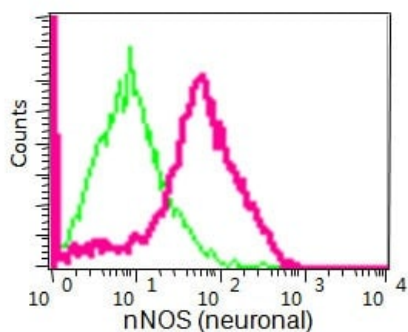
Predicted band size: 161 kDa

Observed band size: 161 kDa



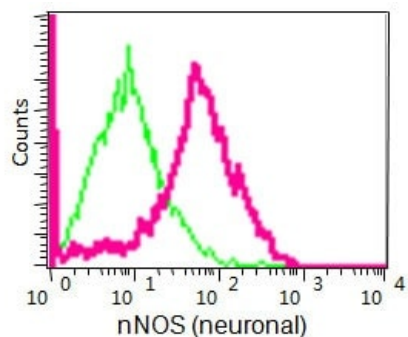
Flow Cytometry (Intracellular) - Anti-nNOS (neuronal) antibody [EP1855Y] (ab76067)

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/1x10⁶ 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.



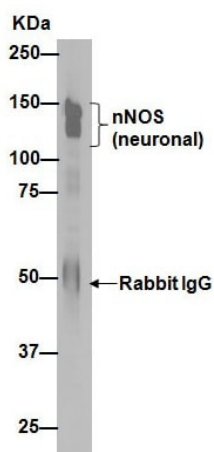
Flow Cytometry (Intracellular) - Anti-nNOS (neuronal)
antibody [EP1855Y] (ab76067)

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.



Flow Cytometry (Intracellular) - Anti-nNOS (neuronal)
antibody [EP1855Y] (ab76067)

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.

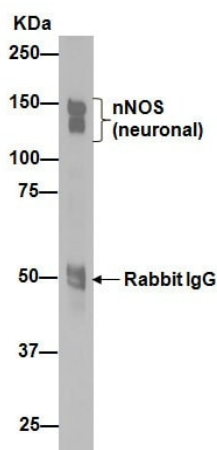


Immunoprecipitation - Anti-nNOS (neuronal) antibody
[EP1855Y] (ab76067)

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.



Immunoprecipitation - Anti-nNOS (neuronal) antibody
[EP1855Y] (ab76067)

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.

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

Anti-nNOS (neuronal) antibody [EP1855Y] (ab76067)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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