

# nNOS Polyclonal Antibody

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse, Rat
Published Species	Rat, Mouse, Human
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic peptide corresponding to residues C N(1411) R L R S E S I A F I E E S K(1425) of human nNOS.
Form	Liquid
Concentration	1 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS with 1mg/mL BSA
Contains	0.05% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_325021

Applications	Tested Dilution	Publications
Western Blot (WB)	1:100-1:1,000	11 Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	1:20-1:200	1 Publication
Immunocytochemistry (ICC/IF)	1:50-1:500	3 Publications

## Product Specific Information

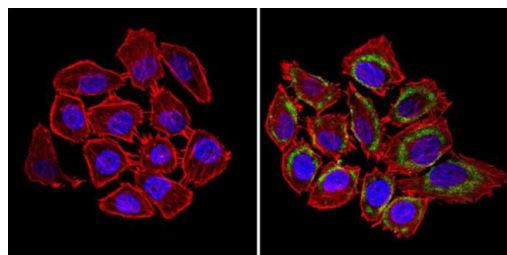
PA1-033 detects nNOS from human, rat and mouse samples.

PA1-033 has been successfully used in Western blot, ICC/IF and immunohistochemistry (paraffin) procedures. By Western blot, this antibody detects an ~160 kDa protein. Detects a few non-specific bands in Western blot analysis of rat and mouse brain lysates. This antibody is not recommended for MCF-7, PC-12, SK-N-C or U87-MG cells in Western blot applications.

The PA1-033 immunogen is a synthetic peptide to residues C N(1411) R L R S E S I A F I E E S K(1425) of human nNOS. The peptide sequence is 100% conserved in rat, mouse, frog, and rabbit nNos proteins. This peptide (Cat. # PEP-190) is available for use in neutralization and control experiments.

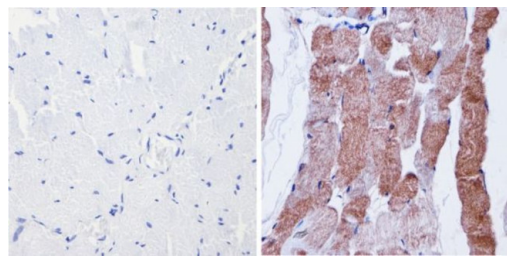
## Product Images For nNOS Polyclonal Antibody

### nNOS Antibody (PA1-033) in ICC/IF



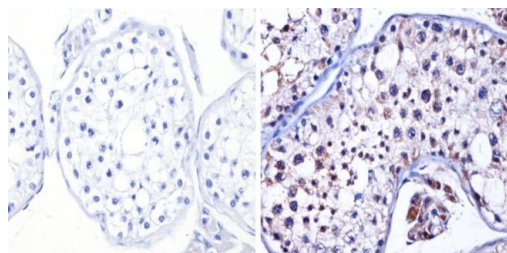
Immunofluorescent analysis of nNOS (green) showing staining in the cytoplasm and membrane of U251 cells (right) compared to a negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with an nNOS polyclonal antibody (Product # PA1-033) in 3% BSA-PBS at a dilution of 1:100 and incubated overnight at 4°C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 60x.

### nNOS Antibody (PA1-033) in IHC (P)



Immunohistochemistry analysis of nNOS showing positive staining in the cytoplasm of paraffin-treated Human skeletal muscle (right) compared with a negative control in the absence of primary antibody (left). To expose target proteins, antigen retrieval method was performed using 10mM sodium citrate (pH 6.0) microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H<sub>2</sub>O<sub>2</sub>-methanol for 15 min at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with a nNOS polyclonal antibody (Product # PA1-033) diluted by 3% BSA-PBS at a dilution of 1:200 overnight at 4°C in a humidified chamber. Tissues were washed extensively PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.

### nNOS Antibody (PA1-033) in IHC (P)



Immunohistochemistry analysis of nNOS showing positive staining in the cytoplasm of paraffin-treated Human testis tissue (right) compared with a negative control in the absence of primary antibody (left). To expose target proteins, antigen retrieval method was performed using 10mM sodium citrate (pH 6.0) microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H<sub>2</sub>O<sub>2</sub>-methanol for 15 min at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with a nNOS polyclonal antibody (Product # PA1-033) diluted by 3% BSA-PBS at a dilution of 1:200 overnight at 4°C in a humidified chamber. Tissues were washed extensively PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.

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## Western Blot (11)

<p><b>Aging</b></p> <p><b>Aging-dependent decrease in the numbers of enteric neurons, interstitial cells of Cajal and expression of connexin43 in various regions of gastrointestinal tract.</b></p> <p>"PA1-033 was used in Western Blotting to study ageing-associated differences between different organs and the exact time to start degenerating."</p> <p>Authors: Sun T,Li D,Hu S,Huang L,Sun H,Yang S,Wu B,Ji F,Zhou D</p>	<p><b>Year</b> 2018</p> <p><b>Species</b> Mouse</p> <p><b>Dilution</b> 1:1,000</p>
<p><b>American journal of physiology. Regulatory, integrative and comparative physiology</b></p> <p><b>Pregnant rats treated with a high-fat/prooxidant Western diet with ANG II and TNF- are resistant to elevations in blood pressure and renal oxidative stress.</b></p> <p>"Published figure using nNOS polyclonal antibody (Product # PA1-033) in Western Blot"</p> <p>Authors: Cunningham MW,West CA,Wen X,Deng A,Baylis C</p>	<p><b>Year</b> 2015</p> <p><b>Species</b> Rat</p> <p><b>Dilution</b> 1:500</p>

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## Immunohistochemistry (1)

<p><b>Cancer &amp; metabolism</b></p> <p><b>ASS1 and ASL suppress growth in clear cell renal cell carcinoma via altered nitrogen metabolism.</b></p> <p>"PA1-033 was used in Immunohistochemistry to elucidate the contributions of urea cycle enzymes, argininosuccinate synthase 1 (ASS1), and argininosuccinate lyase (ASL) towards ccRCC progression."</p> <p>Authors: Khare S,Kim LC,Lobel G,Doulias PT,Ischiropoulos H,Nissim I,Keith B,Simon MC</p>	<p><b>Year</b> 2021</p> <p><b>Species</b> Human</p>
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## Immunohistochemistry (Paraffin) (1)

<p><b>Journal of investigative surgery : the official journal of the Academy of Surgical Research</b></p> <p><b>Effects of Aloe Vera on Spinal Cord Ischemia-Reperfusion Injury of Rats.</b></p> <p>"PA1-033 was used in immunohistochemistry - paraffin section to research spinal cord ischemia-reperfusion injury of rats and the effects of aloe vera"</p> <p>Authors: Yuksel Y,Guven M,Kaymaz B,Sehitoglu MH,Aras AB,Akman T,Tosun M,Cosar M</p>	<p><b>Year</b> 2016</p>
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## More applications with references on thermofisher.com

## ICC/IF (3)

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