Product Datasheet

nNOS Antibody
NB100-858

Unit Size: 0.1 mg

Store at -20C. Avoid freeze-thaw cycles.

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Reviews: 1 Publications: 15

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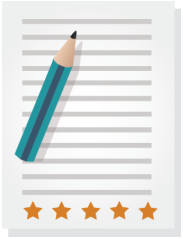
Updated 9/9/2025 v.20.1



NB100-858

nNOS Antibody

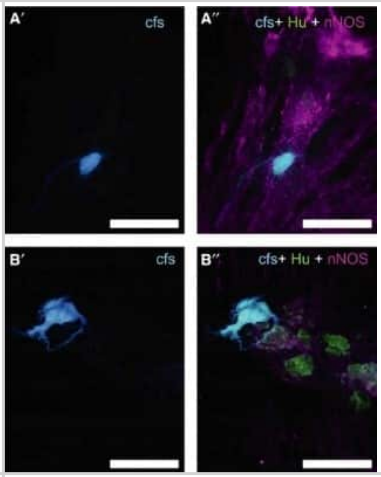
Product Information	
Unit Size	0.1 mg
Concentration	0.5 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	Tris saline (20 mM Tris pH 7.3, 150 mM NaCl), 0.5% BSA
Target Molecular Weight	161 kDa

Product Description	
Description	Novus Biologicals Goat nNOS Antibody (NB100-858) is a polyclonal antibody validated for use in IHC, WB, ELISA, Flow and ICC/IF. Anti-nNOS Antibody: Cited in 14 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Goat
Gene ID	4842
Gene Symbol	NOS1
Species	Human, Mouse, Rat, Guinea Pig
Reactivity Notes	Guinea Pig reactivity reported in scientific literature (PMID: 26397368). Mouse reactivity reported in scientific literature (PMID: 26073142). Rat reactivity reported in scientific literature (PMID: 32278831).
Immunogen	Synthetic peptide with sequence ESKKDTDEVFSS, representing the C-terminus of the human protein (residues 1423-1434) according to NP_000611.

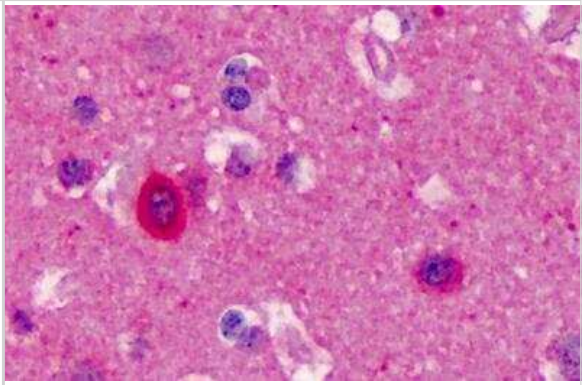
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Peptide ELISA, Immunohistochemistry Whole-Mount
Recommended Dilutions	Western Blot, Flow Cytometry 10 ug/mL, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 10 ug/mL, Immunohistochemistry-Paraffin 2.5 ug/mL, Immunohistochemistry-Frozen, Peptide ELISA detection limit 1:64000, Immunohistochemistry Whole-Mount
Application Notes	Successful use in ICC/IF has been reported in the literature (PMID: 20140458). It has also been used succesfully in IHC (PMID: 20140458). Use in IHC-Frozen and IHC-whole mount reported in scientific literature (PMID 24728885). Use in Western Blot reported in scientific literature (PMID: 32278831).

Images

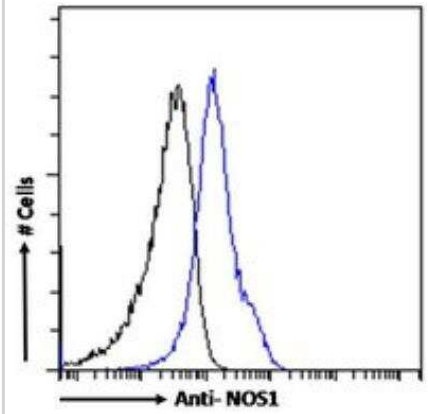
Immunocytochemistry/Immunofluorescence: nNOS Antibody [NB100-858] - Action potentials were evoked with depolarizing current pulses. (A) Neuron from colonic specimen of non-treated patient fired 1 action potential in response to a depolarizing current. (A') Intracellular injection of carboxyfluorescein during recording confirmed Dogiel type I, uniaxonal morphology. (A") IHC demonstrated neuron was Hu-immunoreactive but did not contain nNOS immunoreactivity. (B) Neuron from a chemotherapy-treated patient fired multiple action potentials in response to a smaller depolarising current pulse. (B') Intracellular injection of carboxyfluorescein confirmed neuronal morphology. (B") This neuron was Hu-immunoreactive, but not nNOS-immunoreactive, scale bar = 100 um. Image collected & cropped by CiteAb from the following publication (www.onlinelibrary.wiley.com/doi/10.1111/nmo.12795) licensed under a CC-BY license.



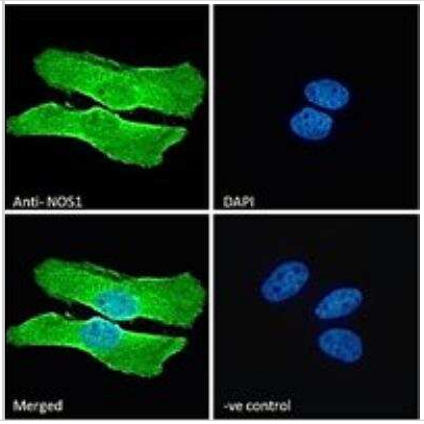
Immunohistochemistry-Paraffin: nNOS Antibody [NB100-858] - Staining of paraffin embedded Human Cortex. Steamed antigen retrieval with citrate buffer pH 6, AP-staining. Antibody at 2.5 ug/mL.



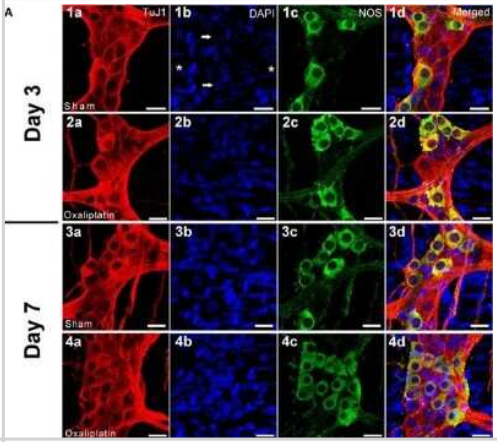
Flow Cytometry: nNOS Antibody [NB100-858] - Flow cytometric analysis of paraformaldehyde fixed Kelly cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (1 ug/mL). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.



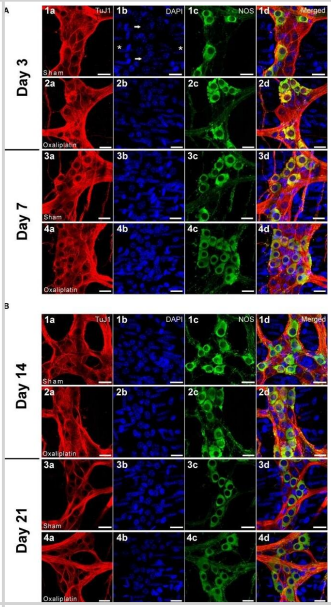
Immunocytochemistry/Immunofluorescence: nNOS Antibody [NB100-858] - Immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (2 ug/mL), showing membrane, cytoplasmic and nuclear staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (2 ug/mL).



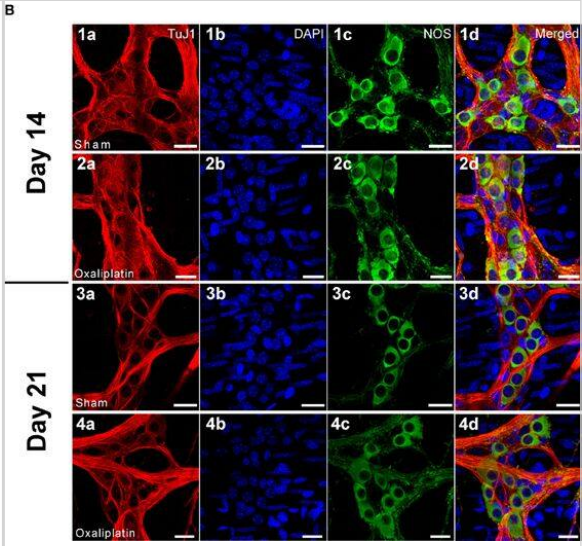
Immunocytochemistry/Immunofluorescence: nNOS Antibody [NB100-858] - Wholemount preparations of the myenteric neurons in the distal colon segments following 3 (2a-2d) and 7 (4a-4d) days of repeated in vivo oxaliplatin administration compared to sham-treated animals at 3 (1a-1d) and 7 (3a-3d) days. Myenteric ganglia and neurons labeled with beta-Tubulin Tuj1 (red), nuclei labeled with DAPI (blue) (arrows) can be seen within the ganglion (1b). Smooth muscle cells (asterisks) are also labeled with DAPI (1b). Significant increase in the proportion of nNOS neurons (green) can be seen at both Days 3 and 7 after oxaliplatin treatment. Scale bar = 20 um. Image collected and cropped by CiteAb from the following publication (www.journal.frontiersin.org/article/10.3389/fnins.2013.00030/abstract) licensed under a CC-BY license.



Immunocytochemistry/ Immunofluorescence: nNOS Antibody [NB100-858] - (A) Wholemount preparations of the myenteric neurons in the distal colon segments following 3 (2a–2d) & 7 (4a–4d) days of repeated in vivo oxaliplatin administration compared to sham-treated animals at 3 (1a–1d) & 7 (3a–3d) days. Myenteric ganglia & neurons labeled with β-Tubulin Tuj1 (red), nuclei labeled with DAPI (blue) (arrows) can be seen within the ganglion (1b). Smooth muscle cells (asterisks) are also labeled with DAPI (1b). Significant increase in the proportion of NOS neurons (green) can be seen at both Days 3 & 7 after oxaliplatin treatment. Scale bar = 20 µm. (B) Wholemount preparations of the myenteric neurons in the distal colon segments following 14 (2a–2d) & 21 (4a–4d) days of repeated in vivo oxaliplatin administration compared to sham-treated animals at 14 (1a–1d) & 21 (3a–3d) days. The reduction in total number of neurons & increase in the proportion of NOS neurons was found at both Days 14 & 21 after oxaliplatin treatment. Scale bar = 20 µm. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/23486839), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Immunocytochemistry/ Immunofluorescence: nNOS Antibody [NB100-858] - (A) Wholemount preparations of the myenteric neurons in the distal colon segments following 3 (2a–2d) & 7 (4a–4d) days of repeated in vivo oxaliplatin administration compared to sham-treated animals at 3 (1a–1d) & 7 (3a–3d) days. Myenteric ganglia & neurons labeled with β-Tubulin Tuj1 (red), nuclei labeled with DAPI (blue) (arrows) can be seen within the ganglion (1b). Smooth muscle cells (asterisks) are also labeled with DAPI (1b). Significant increase in the proportion of NOS neurons (green) can be seen at both Days 3 & 7 after oxaliplatin treatment. Scale bar = 20 µm. (B) Wholemount preparations of the myenteric neurons in the distal colon segments following 14 (2a–2d) & 21 (4a–4d) days of repeated in vivo oxaliplatin administration compared to sham-treated animals at 14 (1a–1d) & 21 (3a–3d) days. The reduction in total number of neurons & increase in the proportion of NOS neurons was found at both Days 14 & 21 after oxaliplatin treatment. Scale bar = 20 µm. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/23486839), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Varga A, M□sz□r Z, Sivad□ M et al. Spinal Excitatory Dynorphinergic Interneurons Contribute to Burn Injury-Induced Nociception Mediated by Phosphorylated Histone 3 at Serine 10 in Rodents International Journal of Molecular Sciences 2021-02-25 [PMID: 33669046]

Caglar Cosarderelioglu, Lolita S Nidadavolu, Claudene J George, Ruth Marx-Rattner, Laura Powell, Qian-Li Xue, Jing Tian, Joy Salib, Esther S Oh, Luigi Ferrucci, Pervin Dincer, David A Bennett, Jeremy D Walston, Peter M Abadir Higher Angiotensin II Type 1 Receptor Levels and Activity in the Postmortem Brains of Older Persons with Alzheimer's Dementia. The journals of gerontology. Series A, Biological sciences and medical sciences 2022-04-05 [PMID: 34914835]

Krawchuk M B, Ruff C F et al. Optogenetic assessment of VIP, PV, SOM and NOS inhibitory neuron activity and cerebral blood flow regulation in mouse somato-sensory cortex. J Cereb Blood Flow Metab 2019-08-16 [PMID: 31418628] (IF/IHC, Mouse)

Auta J, Gatta E, Davis JM et al. Essential role for neuronal nitric oxide synthase in acute ethanol-induced motor impairment Nitric Oxide 2020-04-09 [PMID: 32278831] (WB, Rat)

Assetta B, Morris-Love J, Gee GV et al. Optogenetic assessment of VIP, PV, SOM, and NOS inhibitory neuron activity and cerebral blood flow regulation in mouse somato-sensory cortex Thesis (WB, Mouse)

Brokhman I, Xu J, Coles BLK et al. Dual embryonic origin of the mammalian enteric nervous system. Dev. Biol. 2018-11-22 [PMID: 30472119] (ICC/IF, Mouse)

Bianco F, Eisenman ST, Colmenares Aguilar MG et al. Expression of RAD21 immunoreactivity in myenteric neurons of the human and mouse small intestine Neurogastroenterol. Motil. 2018-08-01 [PMID: 30069982] (ICC/IF, Mouse)

Carbone SE, Jovanovska V, Brookes SJ, Nurgali K et al. Electrophysiological and morphological changes in colonic myenteric neurons from chemotherapy-treated patients: a pilot study Neurogastroenterol. Motil. 2016-02-22 [PMID: 26909894] (IHC-WhMt, Human)

Robinson AM, Miller S, Payne N et al. Neuroprotective Potential of Mesenchymal Stem Cell-Based Therapy in Acute Stages of TNBS-Induced Colitis in Guinea-Pigs. PLoS ONE 2015-09-24 [PMID: 26397368] (IHC-Fr, Guinea Pig)

Petrie CN, Armitage MN, Kawaja MD. Myenteric expression of nerve growth factor and the p75 neurotrophin receptor regulate axonal remodeling as a consequence of colonic inflammation in mice Exp. Neurol. 2015-06-11 [PMID: 26073142] (IHC-Fr, Mouse)

Pelayo JC, Veldhuis NA, Eriksson EM et al. Localisation and activation of the neurokinin 1 receptor in the enteric nervous system of the mouse distal colon. Cell Tissue Res. 2014-04-12 [PMID: 24728885] (IHC-Fr, IHC-WhMt, Mouse)

Zhao P, Canals M, Murphy JE et al. Agonist-biased Trafficking of Somatostatin Receptor 2A in Enteric Neurons. J Biol Chem. 2013-09-06 [PMID: 23913690] (IF/IHC, Mouse)

More publications at http://www.novusbio.com/NB100-858

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HAF109	Donkey anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
NB410-28088-1mg	Goat IgG Isotype Control

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