

# PRODUCT INFORMATION



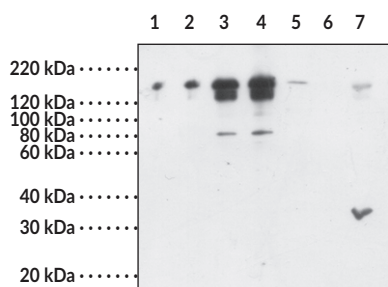
## nNOS Polyclonal Antibody

Item No. 160870

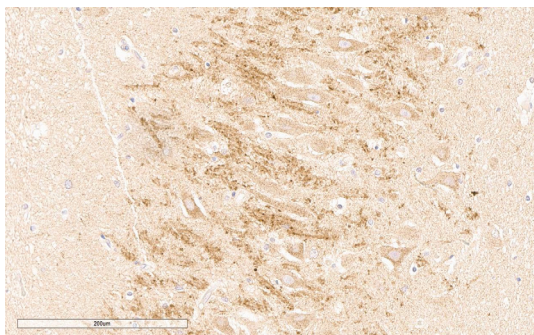
### Overview and Properties

**Contents:** This vial contains 500  $\mu$ l of peptide affinity-purified polyclonal antibody.  
**Synonyms:** Neuronal Nitric Oxide Synthase, NOS I, ncNOS  
**Immunogen:** Synthetic peptide from the C-terminal region of human nNOS  
**Cross Reactivity:** (-) eNOS and iNOS  
**Species Reactivity:** (+) Human and rat; other species not tested  
**Uniprot No.:** P29475  
**Form:** Liquid  
**Storage:** -20°C (as supplied)  
**Stability:**  $\geq$ 3 years  
**Storage Buffer:** PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide  
**Host:** Rabbit  
**Applications:** Immunocytochemistry (ICC), Immunohistochemistry (IHC), and Western blot (WB); the recommended starting dilution for ICC is 1:500 and 1:200 for IHC and WB. A protein of 155-160 kDa should be detected. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Images



Lane 1: nNOS recombinant protein (0.005  $\mu$ g)  
Lane 2: nNOS recombinant protein (0.01  $\mu$ g)  
Lane 3: nNOS recombinant protein (0.05  $\mu$ g)  
Lane 4: nNOS recombinant protein (0.1  $\mu$ g)  
Lane 5: iNOS recombinant protein (0.1  $\mu$ g)  
Lane 6: eNOS recombinant protein (0.1  $\mu$ g)  
Lane 7: Mouse brain soluble membrane (30  $\mu$ g)



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) human brain, cortex, tissue after heat induced antigen retrieval in pH 6.0 citrate buffer. After incubation with nNOS Polyclonal Antibody, (Item No. 160870) at a 1:200 dilution, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen (DAB).

WARNING  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY  
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CAYMAN CHEMICAL  
1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA  
PHONE: [800] 364-9897  
[734] 971-3335  
FAX: [734] 971-3640  
CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM

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## Description

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Nitric oxide synthase (NOS) catalyzes the oxidation of arginine to nitric oxide (NO) and citrulline. Three distinct isoforms of NOS have been described having nomenclature based on the tissue source from which they were originally cloned. These three isoforms are neuronal/brain NOS (nNOS/bNOS/NOS-I), inducible NOS (iNOS/NOS-II), and endothelial NOS (eNOS/NOS-III).<sup>3,4</sup> nNOS is a soluble enzyme found in brain, the peripheral nervous system and skeletal muscle.<sup>1,2</sup> An alternately spliced form of nNOS (nNOS $\mu$ ) containing a 34 amino acid insert has been identified in skeletal muscle.<sup>5</sup> In neurons, protein-protein interactions with PSD95 and PSD93 via the PZD domain at the N-terminus of nNOS localizes the enzyme with NMDA receptors.<sup>6,7</sup> Although nNOS was originally thought to be constitutively expressed, abundant evidence suggests expression is regulated by a variety of conditions.<sup>8</sup>

## References

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CAYMAN CHEMICAL  
1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA  
PHONE: [800] 364-9897  
[734] 971-3335  
FAX: [734] 971-3640  
CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM