

# PRODUCT INFORMATION



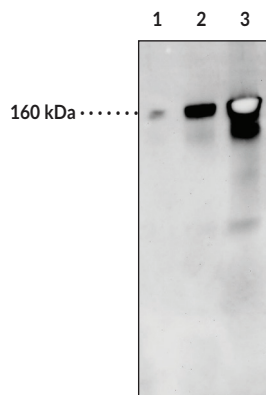
## nNOS Electrophoresis Standard

Item No. 360870

### Overview and Properties

|                        |  |
|------------------------|--|
| <b>Contents:</b>       | This vial contains 5 µg purified nNOS.   |
| <b>Synonyms:</b>       | Neuronal Nitric Oxide Synthase, NOS I, ncNOS   |
| <b>Source:</b>         | Isolated from a Baculovirus overexpression system in Sf9 cells   |
| <b>M<sub>r</sub>:</b>  | 160 kDa/subunit  |
| <b>Purity:</b>         | ≥95%   |
| <b>Storage:</b>        | -80°C (as supplied)  |
| <b>Stability:</b>      | ≥1 year  |
| <b>Storage Buffer:</b> | 50 µl of 50 mM HEPES buffer, pH 7.4, with 20% glycerol   |
| <b>Applications:</b>   | Western blot and gel staining; this enzyme may not be catalytically active. The optimal working concentration/dilution should be determined empirically. |

### Image



Lane 1: nNOS Standard (2 ng)  
Lane 2: nNOS Standard (20 ng)  
Lane 3: nNOS Standard (100 ng)

Samples probed with nNOS Polyclonal Antibody (Item No. 160870).

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  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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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>1,2</sup> nNOS is a soluble enzyme found in brain, the peripheral nervous system and skeletal muscle.<sup>3,4</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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