

**nNOS Rabbit Monoclonal Antibody
Product Data Sheet**

Catalog # 2081-1

Clone ID: EP1855Y **Lot #:** Please refer to vial
Quantity: 100 ul
Type: Rabbit Monoclonal IgG
Species Cross-reactivity: Human Mouse Rat
Applications: WB IHC ICC Flow Cytometry IP
Molecular Wt.: 160 kDa
UniProt ID: P29475

Background: NOS (nitric oxide synthase) is a mediator of NO (nitric oxide) production, an inorganic gaseous messenger between cells. In cells, NOS catalyzes the oxidization of L-arginine to produce L-citrulline and NO. Three isoforms of NOS has been identified (eNOS, iNOS, and nNOS) with all of them having binding sites for NADPH, FAD, FMN, and tetrahydrobiopterin (1). Specifically, nNOS (Neuronal nitric oxide synthase bNOS, cNOS, Type I) is bound to PSD95 located in the neuronal membrane; at increased level of Ca²⁺, nNOS is translocated to the cytoplasm. In the cytoplasm, nNOS is dephosphorylated by calcineurin, which initiates NO production (2). Phosphorylation by PKA and PKC on nNOS leads to downregulation of NO production.

Specificity: A synthetic peptide corresponding to residues around serine 1417 of human nNOS protein was used as an immunogen.

Storage Conditions: Store at -20 °C. Buffer: 50 mM Tris-Glycine (pH 7.4), 0.15 M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. Stable for 12 months from date of receipt.

Recommended Dilutions:

WB: 1:500 – 1000 (mouse and rat only)
IHC: 1:100 – 250
FC: 1:30
IP: 1:20

Please visit www.epitomics.com for recommended protocols

Background References:

1. Dawson TM et al *Prog. Brain Res.*, 118:3-11, 1998.
2. Watanabe Y et al. *Biochem. J.* 372:465-471, 2003.

Related Products:

<u>Antigen</u>	<u>Clone</u>	<u>Catalog #</u>
Lck/p56	Y123	1515-1
LEF-1/TCF-1	EP2030Y	2091-1
MBP	EP1448Y	1982-1

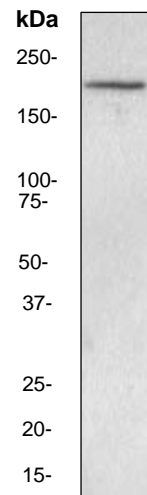


Fig 1. Western blot analysis on mouse brain tissue lysate using anti-nNos RabMAb (cat. # 2081-1), dilution 1:1000

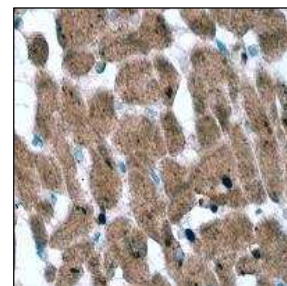


Fig 2. Immunohistochemical analysis of paraffin-embedded human heart muscle using anti-nNOS RabMAb (cat# 2081-1)

Product QC'd by: 

For research use only. Not for use in diagnostic or therapeutic applications.

This product was manufactured under U.S. Patent No. 5,675,063. For a complete list of protocols and available related products, please visit us at www.epitomics.com.

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