

nNOS polyclonal antibody

The diffusible free radical gas nitric oxide (NO) affects a variety of physiological functions, and is a key regulator of the cardiovascular, nervous, and immune systems. NO is synthesized in many tissues from L-arginine, oxygen, and NADPH by three known isoforms of a heme-containing flavoprotein termed NO synthase (nNOS/NOS-I, iNOS/NOS-II, and eNOS/NOS-III). nNOS is a constitutively expressed neuronal NOS isoform that exists in its latent form until it is activated by the binding of calmodulin following elevation of intracellular calcium levels. The C-terminus of nNOS contains a conserved serine residue, Ser1417, analogous to Ser1177 of the constitutively expressed endothelial NOS isoform (eNOS). Phosphorylation of Ser1417 is believed to regulate nNOS activation, particularly in glucose-sensing neurons, where inhibition of AMPK pathways by glucose and leptin serve to suppress nNOS activity, whereas activation of AMPK by insulin leads to nNOS activation.

This antibody is covered by our [Worry-Free Guarantee](#).

Citations: 6

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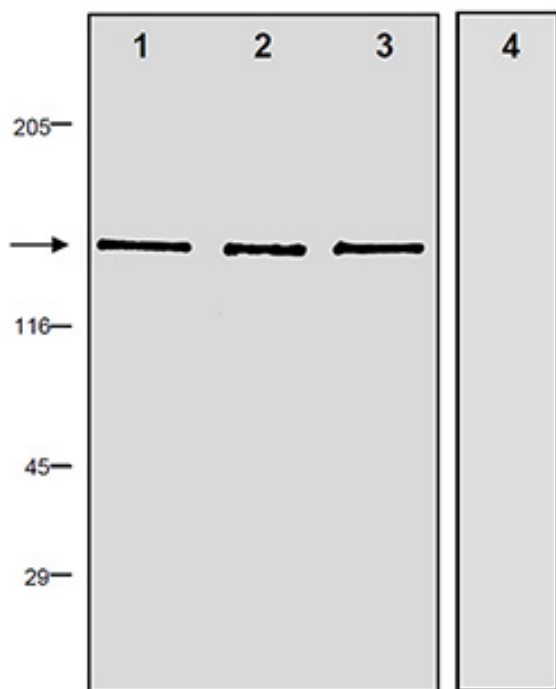
Ordering Information

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BML-SA227-0025	25µg
BML-SA227-0100	100µg

Manuals, SDS & CoFA

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Western blot analysis of nNOS, pAb (Prod. No. BML-SA227) using whole cell extracts from (1) rat brain (BML-SW103), (2) mouse brain (Prod. No. BML-SW104), and (3,4) 10 ng recombinant rat bNOS (Prod. No. BML-SW109). In lane (4) the antibody was preincubated with Prod. No. BML-SP227 blocking control peptide. The nitrocellulose membrane was probed with Prod. No. BML-SA227 at 5 μ g/ml. The secondary antibody was GAR-AP diluted 1/2000 and the blot was developed with BCIP/NBT.

Handling & Storage

Handling	Avoid freeze/thaw cycles. After opening, prepare aliquots and store at -20°C.
Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	Nitric oxide synthase (neuronal), NOS I
Application	ELISA, ICC, IF, WB
Formulation	Liquid. In PBS containing 0.05% sodium azide.
Host	Rabbit
Immunogen	Synthetic peptide corresponding to aa 1414-1434 (CRSESIAFIEESKKDTDEVFSS) of human brain NOS (nNOS; NOS1).
Purity Detail	Protein A-affinity purified.
Recommendation Dilutions/Conditions	Western Blot (1-5 µg/ml)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.
Source	Purified from rabbit serum.
Species Reactivity	Chicken, Human, Mouse, Rat
UniProt ID	P29475
Worry-free Guarantee	This antibody is covered by our Worry-Free Guarantee