
Anti-nNOS

Cat #: HM1255
Rabbit polyclonal IgG
0.2 µg/µl, store at 4 °C

For research use only

BACKGROUND

Nitric oxide is a reactive free radical which acts as a biologic mediator in several processes, including neurotransmission and antimicrobial and antitumoral activities. Nitric oxide synthases (NOSs), the enzymes responsible for synthesis of NO, contain an N-terminal oxygenase domain and a C-terminal reductase domain. NOS activity requires homodimerization as well as three cosubstrates (L-arginine, NADPH and O₂) and five cofactors or prosthetic groups (FAD, FMN, calmodulin, tetra-hydrobiopterin and heme). Several distinct NOS isoforms have been described and been shown to represent the products of three distinct genes. These include two constitutive Ca⁺⁺/CaM-dependent forms of NOS, including ncNOS (also designated NOS1) whose activity was first identified in neurons, and ecNOS (also designated NOS3), first identified in endothelial cells. The inducible form of NOS, iNOS (also designated NOS2), is Ca⁺⁺-independent, and expressed in liver and is inducible by a combination of lipopolysaccharide and certain cytokines.

SPECIFICITY

This antibody reacts with NOS1 (ncNOS) of mouse, rat and human origin by Western blotting, immunoprecipitation and immunohistochemistry; non cross-reactive with NOS2 (iNOS) or NOS3 (ecNOS).

Molecular Weight of NOS1: 155 kDa
Western blotting positive control: mouse brain extract

IMMUNOGEN

A peptide at the carboxy terminus of NOS1 of rat origin.

STORAGE

This antibody is stable for 12 months when stored at 2-8°C.

REFERENCES

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