

PRODUCT INFORMATION



eNOS (bovine recombinant)

Item No. 60880

Overview and Properties

Synonyms: ecNOS, Endothelial Nitric Oxide Synthase, NOS III
Source: Recombinant enzyme; isolated from a Baculovirus overexpression system in Sf9 cells
Uniprot No.: P29473

Batch specific information can be found on the Certificate of Analysis or by contacting Technical Support

Molecular Weight: 135 kDa/subunit • Homodimer
Storage: -80°C (as supplied)
Stability: ≥6 months
Purity: cell lysate 100,000 x g supernatant
Supplied in: 50 mM HEPES, pH 7.4, with 10% glycerol, 5 mM CHAPS, and 100 μM DTT
Protein
Concentration: *batch specific* mg/ml
Activity: *batch specific* U/ml
Specific Activity: *batch specific* U/mg
Unit Definition: One unit of enzyme produces 1 nanomole of nitric oxide per minute at 37°C in 50 mM HEPES, pH 7.4, containing 5 μM oxyhemoglobin, 1 mM CaCl₂, 20 μg/ml calmodulin, 0.1 mM NADPH, 50 μM arginine, 12 μM tetrahydrobiopterin, and 170 μM DTT.

Description

Nitric oxide synthase (NOS) is responsible for the biosynthesis of NO from L-arginine. Constitutively expressed NOS is found in brain (nNOS) and endothelial cells (eNOS), whereas macrophages can be induced by cytokines or endotoxin to express NOS (iNOS).¹ eNOS undergoes several post-translational modifications, including myristylation and palmitoylation, which causes the enzyme to become membrane-associated.²

References

1. Knowles, R.G. and Moncada, S. Nitric oxide synthases in mammals. *Biochem. J.* **298**, 249-258 (1994).
2. Busconi, L. and Michel, T. Recombinant endothelial nitric oxide synthase: Post-translational modifications in a baculovirus expression system. *Mol. Pharmacol.* **47**, 655-659 (1995).

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.

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