

PRODUCT INFORMATION



nNOS Inhibitor I

Item No. 20906

CAS Registry No.: 357965-99-2
Formal Name: N-[(4S)-4-amino-5-[(2-aminoethyl)amino]pentyl]-N'-nitro-guanidine, tris(2,2,2-trifluoroacetate)

Synonyms: Neuronal Nitric Oxide Synthase, NOS I, ncNOS

MF: C₈H₂₁N₇O₂ • 3CF₃COOH
FW: 589.4

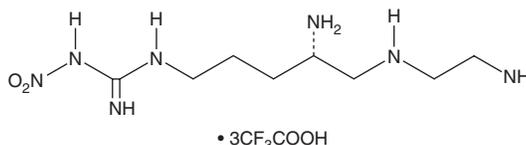
Purity: ≥95%

UV/Vis.: λ_{max}: 269 nm

Supplied as: A solution in ethanol

Storage: -20°C

Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

nNOS inhibitor I is supplied as a solution in ethanol. To change the solvent, simply evaporate the nNOS inhibitor I under a gentle stream of nitrogen and immediately add the solvent of choice. A stock solution may be made by dissolving the nNOS inhibitor I in the solvent of choice. nNOS inhibitor I is soluble in water at a concentration of approximately 50 mg/ml.

Description

nNOS inhibitor I is a cell-permeable, selective inhibitor of nNOS (K_i = 120 nM).¹ It displays >2,500-fold and 320-fold selectivity over eNOS and iNOS, respectively.¹ It has been used in a rabbit model for cerebral palsy to prevent hypoxia-ischemia-induced death and to reduce the number of newborn kits exhibiting signs of cerebral palsy.²

References

1. Hah, J.-M., Roman, L.J., Martásek, P., *et al.* Reduced amide bond peptidomimetics. (4S)-N-(4-amino-5-[aminoalkyl]aminopentyl)-N'-nitroguanidines, potent and highly selective inhibitors of neuronal nitric oxide synthase. *J. Med. Chem.* **44**(16), 2667-2670 (2001).
2. Ji, H., Tan, S., Igarashi, J., *et al.* Selective neuronal nitric oxide synthase inhibitors and the prevention of cerebral palsy. *Ann. Neurol.* **65**(2), 209-217 (2009).

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.

Copyright Cayman Chemical Company, 10/27/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM