



碧云天生物技术/Beyotime Biotechnology
订货热线: 400-1683301 或 800-8283301
订货 e-mail: order@beyotime.com
技术咨询: info@beyotime.com
网址: http://www.beyotime.com

L-NAME (eNOS抑制剂)

产品编号	产品名称	包装
S0006	L-NAME (eNOS抑制剂)	200mg

产品简介:

- L-NAME, 即 N^G-Nitro-L-arginine Methyl Ester, Hydrochloride, 也称 L-NAME, HCl 或 N^o-NO₂-L-Arg-OMe 或 N^G-NO₂-L-Arg-OMe, 是eNOS (endothelial nitric oxide synthase)的可逆抑制剂, IC₅₀ = 500nM。高浓度L-NAME(例如100μM 或更高浓度)也可以显著抑制iNOS和nNOS。
- L-NAME为接近白色的粉末, 分子量269.7, 分子式为C₇H₁₅N₅O₄·HCl, 纯度大于98%。
- 溶解于水, 可以配制成50mg/ml的水溶液。

包装清单:

产品编号	产品名称	包装
S0006	L-NAME (eNOS抑制剂)	200mg
—	说明书	1份

保存条件:

-20°C避光保存, 一年有效。

注意事项:

- 如果配制成水溶液, 分装后-20°C保存, 4个月内有效。
- 本产品仅限于专业人员的科学研究用, 不得用于临床诊断或治疗, 不得用于食品或药品, 不得存放于普通住宅内。
- 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

使用说明:

1. L-NAME储备液的配制: 称取少量L-NAME, 推荐使用Milli-Q级纯水溶解L-NAME, 使浓度为50mg/ml。
2. L-NAME的工作浓度通常为10-100μM。少数情况下浓度需达到500μM甚至5mM才可以观察到显著效果。其最佳工作浓度需根据具体的实验, 自行摸索。可以先分别尝试10、30和100μM这三个浓度。如果效果不佳, 可以尝试1μM等低浓度或300μM等更高浓度。

使用本产品的文献:

1. Pei H, Yu Q, Xue Q, Guo Y, Sun L, Hong Z, Han H, Gao E, Qu Y, Tao L. . Notch1 cardioprotection in myocardial ischemia/reperfusion involves reduction of oxidative/nitrative stress. *Basic Res Cardiol.* 2013 Sep;108(5):373.
2. Guo Y, Guo M, Zhao W, Chen K, Zhang P. . Burdock fructooligosaccharide induces stomatal closure in *Pisum sativum*. *Carbohydrate Polymers.* 2013 Sep 12;97(2):731-735.
3. An XZ, Zhao ZG, Luo YX, Zhang R, Tang XQ, Hao D, Zhao X, Lv X, Liu D. . Netrin-1 suppresses the MEK/ERK pathway and ITGB4 in pancreatic cancer. *ONCOTARGET.* 2016 Apr 26;7(17):24719-33.
4. Chen XH, Liu SR, Peng B, Li D, Cheng ZX, Zhu JX, Zhang S, Peng YM, Li H, Zhang TT, Peng XX. . Exogenous l-Valine Promotes Phagocytosis to Kill Multidrug-Resistant Bacterial Pathogens. *Front Immunol.* 2017 Mar 6;8:207.
5. Ma S, Zhang Z, Yi F, Wang Y, Zhang X, Li X, Yuan Y, Cao F. . Protective effects of low-frequency magnetic fields on cardiomyocytes from ischemia reperfusion injury via ROS and NO/ONOO-. *Oxid Med Cell Longev.* 2013;2013:529173.
6. Wang GF, Wu SY, Rao JJ, Lü L, Xu W, Pang JX, Liu ZQ, Wu SG, Zhang JJ. . Genipin inhibits endothelial exocytosis via nitric oxide in cultured human umbilical vein endothelial cells. *Acta Pharmacol Sin.* 2009 May;30(5):589-96.
7. Li XL, Zou XM, Gao P, Li YL, Wang H, Chen XW. . Role of nitric oxide in ischemia-reperfusion injury and acute rejection in rat intestinal transplantation. *TRANSPL P.* 2008 Dec;40(10):3342-5.
8. Zhong W, Zou G, Gu J, Zhang J. . L-arginine attenuates high glucose-accelerated senescence in human umbilical vein endothelial cells. *Diabetes Res Clin Pract.* 2010;89(1):38-45.
9. Li ZL, Liu JC, Liu SB, Li XQ, Yi DH, Zhao MG. . Improvement of vascular function by acute and chronic treatment with the GPR30 agonist G1 in experimental diabetes mellitus. *PLoS One.* 2012;7(6):e38787.
10. Zhang QH, Zu XY, Cao RX, Liu JH, Mo ZC, Zeng Y, Li YB, Xiong SL, Liu X, Liao DF, Yi GH. . An involvement of SR-B1 mediated PI3K-Akt-eNOS signaling in HDL-induced cyclooxygenase 2 expression and prostacyclin production in endothelial cells. *BIOCHEM BIOPH RES CO.* 2012 Mar 30;420(1):17-23.

11. Hong Q, Qi K, Feng Z, Huang Z, Cui S, Wang L, Fu B, Ding R, Yang J, Chen X, Wu D. . Hyperuricemia induces endothelial dysfunction via mitochondrial Na⁺/Ca²⁺ exchanger-mediated mitochondrial calcium overload. *Cell Calcium*. 2012 May;51(5):402-10.
12. Zhang Y, Liu H, Yin H, Wang W, Zhao X, Du Y. . Nitric oxide mediates alginate oligosaccharides-induced root development in wheat (*Triticum aestivum* L.). *Plant Physiology and Biochemistry*. 2013 Oct;71:49-56.
13. Chen W, Wang J, Chen J, Chen J, Chen Z. . Relationship between changes in the cochlear blood flow and disorder of hearing function induced by blast injury in guinea pigs. *INT J CLIN EXP PATHO*. 2013;6(3):375-84.
14. Yan T, Cui K, Huang X, Ding S, Zheng Y, Luo Q, Liu X, Zou L. . Assessment of therapeutic efficacy of miR-126 with contrast-enhanced ultrasound in preeclampsia rats. *Placenta*. 2014 Jan;35(1):23-9.
15. Lu CL, Wang Y, Yuan L, Li Y, Li XY. . The angiotensin-converting enzyme 2/angiotensin (1-7)/Mas axis protects the function of pancreatic β cells by improving the function of islet microvascular endothelial cells. *Int J Mol Med*. 2014 Nov;34(5):1293-300.
16. Ding H, Hong C, Wang Y, Liu J, Zhang N, Shen C, Wei W, Zheng F. . Calreticulin promotes angiogenesis via activating nitric oxide signalling pathway in rheumatoid arthritis. *Clin Exp Immunol*. 2014 Nov;178(2):236-44.
17. Tang Y, Yin Y, Miao L, Wei B, Zhai K, Ji G. . Nitric oxide enhances extracellular ATP induced Ca²⁺ oscillation in HeLa cells. *Arch Biochem Biophys*. 2015 Jan 1;565:68-75.
18. Cao J, Xie H, Sun Y, Zhu J, Ying M, Qiao S, Shao Q, Wu H, Wang C. . Sevoflurane post-conditioning reduces rat myocardial ischemia reperfusion injury through an increase in NOS and a decrease in phosphorylated NHE1 levels. *Int J Mol Med*. 2015 Dec;36(6):1529-37.
19. Wu Q, Zhong ZM, Zhu SY, Liao CR, Pan Y, Zeng JH, Zheng S, Ding RT, Lin QS, Ye Q, Ye WB, Li W, Chen JT. . Advanced oxidation protein products induce chondrocyte apoptosis via receptor for advanced glycationend products-mediated, redox-dependent intrinsic apoptosis pathway. *Apoptosis*. 2016 Jan;21(1):36-50.
20. Yin S, Zhang S, Tong G, Deng L, Liang T, Zhang J. . In vitro vasorelaxation mechanisms of Isoapiole extracted from Lemonfragrant Angelica Root on rat thoracic aorta. *J Ethnopharmacol*. 2016 Jul 21;188:229-33.
21. Wu KW, Kou ZW, Mo JL, Deng XX, Sun FY. . Neurovascular coupling protects neurons against hypoxic injury via inhibition of potassium currents by generation of nitric oxide in direct neuron and endothelium cocultures. *Neuroscience*. 2016 Oct 15;334:275-282.
22. Li XH, Xue WL, Wang MJ, Zhou Y, Zhang CC, Sun C, Zhu L, Liang K, Chen Y, Tao BB, Tan B, Yu B, Zhu YC. . H2S regulates endothelial nitric oxide synthase protein stability by promoting microRNA-455-3p expression. *SCI REP-UK*. 2017 Mar 21;7:44807.
23. Huang D, Cui L, Guo P, Xue X, Wu Q, Hussain HI, Wang X, Yuan Z. . Nitric oxide mediates apoptosis and mitochondrial dysfunction and plays a role in growth hormone deficiency by nivalenol in GH3 cells. *SCI REP-UK*. 2017 Dec 6;7(1):17079.
24. Yu L, Yin M, Yang X, Lu M, Tang F, Wang H. . Calpain inhibitor I attenuates atherosclerosis and inflammation in atherosclerotic rats through eNOS/NO/NF- κ B pathway. *CAN J PHYSIOL PHARM*. 2018 Jan;96(1):60-67.
25. Bao XC, Mao AR, Fang YQ, Fan YH, Wang FF, Ma J, You P. . Simvastatin decreases hyperbaric oxygen-induced acute lung injury by upregulating eNOS. *AM J PHYSIOL-LUNG C*. 2018 Feb 1;314(2):L287-L297.
26. Zhang J, Yin J, Wang Y, Li B, Zeng X. . Apelin impairs myogenic response to induce diabetic nephropathy in mice. *FASEB J*. 2018 Aug;32(8):4315-4327.
27. Wang YX, Liu HB, Li PS, Yuan WX, Liu B, Liu ST, Qin KR. . ROS and NO Dynamics in Endothelial Cells Exposed to Exercise-Induced Wall Shear Stress. *Cell Mol Bioeng*. 2018 Oct 8 12(1):107-120.
28. Yu W, Chen H, Yang H, Ding J, Xia P, Mei X, Wang L, Chen S, Zou C, Wang LX. . Dissecting Molecular Mechanisms Underlying Pulmonary Vascular Smooth Muscle Cell Dedifferentiation in Pulmonary Hypertension: Role of Mutated Caveolin-1 (Cav1F92A)-Bone Marrow Mesenchymal Stem Cells. *Heart Lung Circ*. 2019 Oct 28(10):1587-1597.
29. Yu WC, Chen HY, Yang HL, Xia P, Zou CW, Sun TW, Wang LX. . rBMSC/Cav-1F92A Mediates Oxidative Stress in PAH Rat by Regulating SelW/14-3-3 η and CA1/Kininogen Signal Transduction. *Stem Cells Int*. 2019 Oct 28 2019:6768571.
30. Erfei Zhang, Xiaoying Zhao, Huihui Ma, Dailei Luo, Yanjing Hu, Lichao Hou, Zhikai Luo. . A subanesthetic dose of sevoflurane combined with oxygen exerts bactericidal effects and prevents lung injury through the nitric oxide pathway during sepsis *Biomed Pharmacother*. 2020 Jul;127:110169.
31. Wei Liu, Yong Wang, Zheming Leng, Qi Wang, Xiaoxia Duan, Yutong Luo, Yiren Jiang, Li Qin. . Nitric oxide plays a crucial role in midgut immunity under microsporidian infection in *Antheraea pernyi* *Mol Immunol*. 2020 Oct;126:65-72.
32. Lei Liu, Hexi Zhang, Yijun Shi, Lijian Pan. . Prostaglandin E1 Improves Cerebral Microcirculation Through Activation of Endothelial NOS and GRPCH1 *J Mol Neurosci*. 2020 Dec;70(12):2041-2048.
33. Peikun Zhao, Zidai Song, Yan Wang, Han Cai, Xiaoyan Du, Changlong Li, Jianyi Lv, Xin Liu, Meng Guo, Zhenwen Chen. . The endothelial nitric oxide synthase/cyclic guanosine monophosphate/protein kinase G pathway activates primordial follicles Aging (Albany NY). 2020 Dec 3;13(1):1096-1119.
34. Qin Huang, Meng Gong, Tuantuan Tan, Yunong Lin, Yan Bao, Cuifang Fan. . Human Umbilical Cord Mesenchymal Stem Cells-Derived Exosomal MicroRNA-18b-3p Inhibits the Occurrence of Preeclampsia by Targeting LEP *Nanoscale Res Lett*. 2021 Feb 10;16(1):27.
35. Bang-Qiao Yin, Yu-Hong Guo, Yuan Liu, Yang-Yang Zhao, Shan-Mei Huang, Xia-Wei Wei, Heng-Sheng Wang, Ruo-Ya Liu, Ying Liu, Yao-Ping Tang. . Molecular mechanism of Chuanxiong Rhizoma in treating coronary artery diseases *Chin Herb Med*. 2021 Mar 17;13(3):396-402.
36. Hao Liang, Rongchuan Yue, Chao Zhou, Mengyu Liu, Xi Yu, Shengzhong Lu, Jing Zeng, Zhengping Yu, Zhou Zhou, Houxiang Hu. . Cadmium exposure induces endothelial dysfunction via disturbing lipid metabolism in human microvascular endothelial cells *J Appl Toxicol*. 2021 May;41(5):775-788.
37. Pu Guo, Qirong Lu, Siyi Hu, María-Aránzazu Martínez, Bernardo Lopez-Torres, Marta Martínez, María-Rosa Martínez-Larrañaga, Xu Wang, Arturo Anadón, Irma Ares. . The NO-dependent caspase signaling pathway is a target of deoxynivalenol in growth inhibition in vitro *Food Chem Toxicol*. 2021 Dec;158:112629.