



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

SMT (iNOS抑制剂)

产品编号	产品名称	包装
S0008-100mg	SMT (iNOS抑制剂)	100mg
S0008-1g	SMT (iNOS抑制剂)	1g

产品简介：

- SMT, 即S-Methylisothiourea Sulfate, 也称2-Methyl-2-thiopseudourea, Sulfate, 或S-Methyl-ITU, 是iNOS (inducible nitric oxide synthase)高度选择性抑制剂。对于体外培养巨噬细胞诱导产生的iNOS, EC₅₀=6μM; 对于血管平滑肌细胞被诱导产生的iNOS, EC₅₀=2μM。
- SMT为白色结晶, 分子量278.4, 分子式为(C₂H₆N₂S)₂·H₂SO₄, 纯度大于99%。
- 溶解于水; 用1M盐酸可以配制成25mg/ml的无色透明溶液。

包装清单：

产品编号	产品名称	包装
S0008-100mg	SMT (iNOS抑制剂)	100mg
S0008-1g	SMT (iNOS抑制剂)	1g
—	说明书	1份

保存条件：

室温保存，两年有效。

注意事项：

- 如果配制成水溶液, 分装后-20°C保存, 半年有效。
- 本产品仅限于专业人员的科学的研究用, 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：

SMT的工作浓度通常为0.1-1mM。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0.1、0.3和1mM这三个浓度。

使用本产品的文献：

1. Li W, Ren G, Huang Y, Su J, Han Y, Li J, Chen X, Cao K, Chen Q, Shou P, Zhang L, Yuan ZR, Roberts AI, Shi S, Le AD, Shi Y. Mesenchymal stem cells: a double-edged sword in regulating immune responses. *Cell Death Differ.* 2012 Sep;19(9):1505-13.
2. Han Wu, Xiaofan Yin, Xibao Zhao, Zherui Wu, Yue Xiao, Qianqian Di, Ping Sun, Haimei Tang, Jiazheng Quan, Weilin Chen. HDAC11 negatively regulates antifungal immunity by inhibiting Nos2 expression via binding with transcriptional repressor STAT3 Redox Biol. 2022 Oct;56:102461.
3. Wu C, Zhao W, Zhang X, Chen X. Neocryptotanshinone inhibits lipopolysaccharide-induced inflammation in RAW264.7 macrophages by suppression of NF-κB and iNOS signaling pathways. *Acta Pharm Sin B.* 2015 Jul;5(4):323-9.
4. Chen XH, Liu SR, Peng B, Li D, Cheng ZX, Zhu JX, Zhang S, Peng YM, Li H, Zhang TT, Peng XX1. Exogenous l-Valine Promotes Phagocytosis to Kill Multidrug-Resistant Bacterial Pathogens. *Front Immunol.* 2017 Mar 6;8:207.
5. Zhang F, Liao L, Ju Y, Song A, Liu Y. Neurochemical plasticity of nitric oxide synthase isoforms in neurogenic detrusor overactivity after spinal cord injury. *Neurochem Res.* 2011 Oct;36(10):1903-9.
6. Mao YF, Zhang YL, Yu QH, Jiang YH, Wang XW, Yao Y, Huang JL. Chronic restraint stress aggravated arthritic joint swell of rats through regulating nitric oxide production. *NITRIC OXIDE-BIOL CH.* 2012 Oct 15;27(3):137-42.
7. Xu J, Jin DQ, Zhao P, Song X, Sun Z, Guo Y, Zhang L. Sesquiterpenes inhibiting NO production from *Celastrus orbiculatus*. *Fitoterapia.* 2012 Dec;83(8):1302-5.
8. Jiang Q, Zhou Z, Wang L, Shi X, Wang J, Yue F, Yi Q, Yang C, Song L. The immunomodulation of inducible nitric oxide in scallop *Chlamys farreri*. *FISH SHELLFISH IMMUN.* 2013 Jan;34(1):100-8.
9. Sun Z, Jiang Q, Wang L, Zhou Z, Wang M, Yi Q, Song L. The comparative proteomics analysis revealed the modulation of inducible nitric oxide on the immune response of scallop *Chlamys farreri*. *FISH SHELLFISH IMMUN.* 2014 Oct;40(2):584-94.
10. Li Y, Ma C, Shi X, Wen Z, Li D, Sun M, Ding H. Effect of nitric oxide synthase on multiple drug resistance is related to Wnt signaling in non-small cell lung cancer. *Oncol Rep.* 2014 Oct;32(4):1703-8.

11. Yan K, Zhang R, Chen L, Chen F, Liu Y, Peng L, Sun H, Huang W, Sun C, Lv B, Li F, Cai Y, Tang Y, Zou Y, Du M, Qin L, Zhang H, Jiang X. . Nitric oxide-mediated immunosuppressive effect of human amniotic membrane-derived mesenchymal stem cells on the viability and migration of microglia. *Brain Res.* 2014 Nov 24;1590:1-9.
12. Han Y, Jiang Q, Gao H, Fan J, Wang Z, Zhong F, Zheng Y, Gong Z, Wang C. . The anti-apoptotic effect of polypeptide from Chlamys farreri (PCF) in UVB-exposed HaCaT cells involves inhibition of iNOS and TGF- β 1. *Cell Biochem Biophys.* 2015 Mar;71(2):1105-15.
13. Wu B, Geng S, Bi Y, Liu H, Hu Y, Li X, Zhang Y, Zhou X, Zheng G, He B, Wang B. . Herpes Simplex Virus 1 Suppresses the Function of Lung Dendritic Cells via Caveolin-1. *Clin Vaccine Immunol.* 2015 Aug;22(8):883-95.
14. Su Z, Ye J, Qin Z, Ding X. . Protective effects of madecassoside against Doxorubicin induced nephrotoxicity in vivo and in vitro. *SCI REP-UK.* 2015 Dec 14;5:18314.
15. Li S, Chen S, Yang W, Liao L, Li S, Li J, Zheng Y, Zhu D. . Allicin relaxes isolated mesenteric arteries through activation of PKA-KATP channel in rat. *J RECEPT SIG TRANSD.* 2017 Feb;37(1):17-24.
16. Liu X, Guo P, Liu A, Wu Q, Xue X, Dai M, Hao H, Qu W, Xie S, Wang X, Yuan Z. . Nitric oxide (NO)-mediated mitochondrial damage plays a critical role in T-2 toxin-induced apoptosis and growth hormone deficiency in rat anterior pituitary GH3 cells. *Food Chem Toxicol.* 2017 Apr;102:11-23.
17. Xiao R, Li S, Cao Q, Wang X, Yan Q, Tu X, Zhu Y, Zhu F. . Human endogenous retrovirus W env increases nitric oxide production and enhances the migration ability of microglia by regulating the expression of inducible nitric oxide synthase. *Virol Sin.* 2017 Jun;32(3):216-225.
18. Tu Y, Zhang L, Tong L, Wang Y, Zhang S, Wang R, Li L, Wang Z. . EFhd2/swiprosin-1 regulates LPS-induced macrophage recruitment via enhancing actinpolymerization and cell migration. *Int Immunopharmacol.* 2018 Feb;55:263-271.
19. Liang B, Su J. . Inducible Nitric Oxide Synthase (iNOS) Mediates Vascular Endothelial Cell Apoptosis in Grass Carp Reovirus (GCRV)-Induced Hemorrhage. *Int J Mol Sci.* 2019 Dec 16 20(24). pii: E6335.
20. Baobao Zhang, Xiaolong Hu, Huizhe Wang, Rong Wang, Zhongxuan Sun, Xiaomei Tan, Shumeng Liu, Hao Wang. . Effects of a dammarane-type saponin, ginsenoside Rd, in nicotine-induced vascular endothelial injury Phytomedicine. 2020 Dec;79:153325.
21. 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.
22. Pu Guo, Qirong Lu, Siyi Hu, María-Aráñazu 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.
23. Zhiyong Zhang, Yaojun Zheng, Ying Chen, Yuxin Yin, Yuxi Chen, Qianyu Chen, Yayı Hou, Sunan Shen, Mingming Lv, Tingting Wang. . Gut fungi enhances immunosuppressive function of myeloid-derived suppressor cells by activating PKM2-dependent glycolysis to promote colorectal tumorigenesis Exp Hematol Oncol. 2022 Nov 8;11(1):88.

Version 2024.03.12