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Leptomycin B (出核转运抑制剂)

产品编号	产品名称	包装
S1726-10μg	Leptomycin B (出核转运抑制剂)	0.2mg/ml×0.05ml
S1726-50μg	Leptomycin B (出核转运抑制剂)	0.2mg/ml×0.25ml

产品简介：

- Leptomycin B简称LMB，是一种常用的出核转运(nuclear export)抑制剂，也是一种重要的出核转运的研究工具。Leptomycin B可以直接和CRM1结合，从而抑制CRM1和带有出核信号(nuclear export signal)的蛋白结合，最终导致由CRM1介导的出核转运的抑制。Leptomycin B是一种不饱和支链脂肪酸，可以通透细胞，抑制细胞核向细胞浆的蛋白转运。
- Leptomycin B分子量为540.73，分子式为$C_{33}H_{48}O_6$，CAS Number：87081-35-4。本产品纯度大于98%。
- 本Leptomycin B为进口分装，用无水乙醇配制，浓度为0.2mg/ml，有0.05ml和0.25ml两种包装。

包装清单：

产品编号	产品名称	包装
S1726-10μg	Leptomycin B (出核转运抑制剂)	0.2mg/ml×0.05ml
S1726-50μg	Leptomycin B (出核转运抑制剂)	0.2mg/ml×0.25ml
—	说明书	1份

保存条件：

-20°C避光保存，半年有效。

注意事项：

- 本产品对人体有毒，操作时请特别小心，并注意有效防护以避免直接接触人体或吸入体内。
- Leptomycin B的溶剂易挥发，保存时务必注意密封保存；并且取用时宜在冰浴上进行，以减少挥发。
- 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. Leptomycin B常见使用浓度范围为1-100nM。具体的最佳工作浓度请参考相关文献，或根据实验目的，以及所培养的特定细胞和组织，通过实验进行摸索和优化。

使用本产品的文献：

1. Weimin Shen, Bo Gong, Cencan Xing, Lin Zhang, Jiawei Sun, Yuling Chen, Changmei Yang, Lu Yan, Luxi Chen, Likun Yao, Guangyuan Li, Haiteng Deng, Xiaotong Wu, Anming Meng . Comprehensive maturity of nuclear pore complexes regulates zygotic genome activation Cell. 2022 Dec 22;185(26):4954-4970.e20.
2. Zhang H, Hou W, Wang HL, Liu HJ, Jia XY, Zheng XZ, Zou YX, Li X, Hou L, McNutt MA, Zhang B. . GSK-3β-regulated N-acetyltransferase 10 is involved in colorectal cancer invasion. Clin Cancer Res. 2014 Sep 1;20(17):4717-29.
3. Zou Q, Tan S, Yang Z, Zhan Q, Jin H, Xian J, Zhang S, Yang L, Wang L, Zhang L. . NPM1 Mutant Mediated PML Delocalization and Stabilization Enhances Autophagy and CellSurvival in Leukemic Cells. Theranostics. 2017 Jun 1;7(8):2289-2304.
4. Hao Zeng, Lingling Wang, Jiawei Zhang, Ting Pan, Yinghua Yu, Jingxia Lu, Ping Zhou, Hua Yang, Ping Li . Activated PKB/GSK-3 β synergizes with PKC- δ signaling in attenuating myocardial ischemia/reperfusion injury via potentiation of NRF2 activity: Therapeutic efficacy of dihydrotanshinone-I Acta Pharm Sin B. 2021 Jan;11(1):71-88.
5. Zhanwu Zhu, Jingjing Liu, Huan Feng, Yanning Zhang, Ruiqi Huang, Qiaochu Pan, Jing Nan, Ruidong Miao, Bo Cheng . Overcoming the cytoplasmic retention of GDOWN1 modulates global transcription and facilitates stress adaptation Elife. 2022 Dec 7:11:e79116.
6. She ZY, Yang WX. . Nucleocytoplasmic shuttling of SOX14A and SOX14B transcription factors. ONCOTARGET. 2017 Jul 18;8(29):46955-46968.
7. Yixin Luo, Zhenlai Zhu, Bing Li, Xiaocui Bai, Hui Fang, Pei Qiao, Jiaoling Chen, Chen Zhang, Dalong Zhi, Erle Dang, Gang Wang . Keratin 17 Promotes T Cell Response in Allergic Contact Dermatitis by Upregulating C-C Motif Chemokine Ligand 20 Front Immunol. 2022 Feb 1:13:764793.
8. Qiu J, Peng Q, Zheng Y, Hu J, Luo X, Teng Y, Jiang T, Yin T, Tang C, Wang G. . OxLDL stimulates Id1 nucleocytoplasmic shuttling in endothelial cell angiogenesis via PI3KPathway. BBA-BIOMEMBRANES. 2012 Jul 24;1821(10):1361-9.
9. Duan Y, Brenig B, Wu X, Ren J, Huang L. . The G32E functional variant reduces activity of PPARD by nuclear export and post-translational modification in pigs. PLoS One. 2013 Sep 18;8(9):e75925.

10. Xu J, Li Y, Yang X, Chen Y, Chen M. . Nuclear translocation of small G protein RhoA via active transportation in gastric cancer cells. Oncol Rep. 2013 Oct;30(4):1878-82.
11. Wu S, Zheng SD, Huang HL, Yan LC, Yin XF, Xu HN, Zhang KJ, Gui JH, Chu L, Liu XY. . Lithium down-regulates histone deacetylase 1 (HDAC1) and induces degradation of mutant huntingtin. J Biol Chem. 2013 Dec 6;288(49):35500-10.
12. Fu C, Chen D, Chen R, Hu Q, Wang G. . The Schizophrenia-Related Protein Dysbindin-1A Is Degraded and Facilitates NF-Kappa B Activity in the Nucleus. PLoS One. 2015 Jul 14;10(7):e0132639.
13. Li Y, Zhu J, Liu Y, Chen X, Lei S, Li L, Jiang B, Tan L, Yu S, Zhao Y. . Glycogen Synthase Kinase 3β Influences Injury Following Cerebral Ischemia/Reperfusion in Rats. Int J Biol Sci. 2016 Feb 29;12(5):518-31.
14. Shi Y, Zhang H, Han Z, Mi X, Zhang W, Lv M. . HBx interacted with Smad4 to deprive activin a growth inhibition function in hepatocyte HL7702 on CRM1 manner. TUMOR BIOL . 2016 Mar.37(3):3405-15.
15. Su C, Shi Q, Song X, Fu J, Liu Z, Wang Y, Wang Y, Xia X, Song E, Song Y. . Tetrachlorobenzoquinone induces Nrf2 activation via rapid Bach1 nuclear export/ubiquitination and JNK-P62 signaling. Toxicology. 2016 Jul 1;363-364:48-57.
16. Chen Z, Liu S, Sun W, Chen L, Yoo D, Li F, Ren S, Guo L, Cong X, Li J, Zhou S, Wu J, Du Y, Wang J. . Nuclear export signal of PRRSV NSP1α is necessary for type I IFN inhibition. Virology. 2016 Dec;499:278-287.
17. Zhang H, Yu F, Qin F, Shao Y, Chong W, Guo Z, Liu X, Fu L, Gu F, Ma Y. . Combination of cytoplasmic and nuclear girdin expression isan independent prognosis factor of breast cancer. FASEB J. 2018 Jan 8:fj201700825RR.
18. Qin H, Gao F, Wang Y, Huang B, Peng L, Mo B, Wang C . Nur77 promotes cigarette smoke-induced autophagic cell death by increasing the dissociation of Bcl2 from Beclin-1. Int J Mol Med. 2019 Jul 44(1):25-36.
19. Sun L, Büeler H . Proteasome inhibition promotes mono-ubiquitination and nuclear translocation of mature (52 kDa) PINK1. BIOCHEM BIOPH RES CO. 2019 Sep 17 517(2):376-382.
20. Zhang X, Xia Y, Yang L, He J, Li Y, Xia C . Brevilin A, a Sesquiterpene Lactone, Inhibits the Replication of Influenza A Virus In Vitro and In Vivo. VIRUSES-BASEL. 2019 Sep 8 11(9). pii: E835.
21. Wang Y, Zhang H, Na L, Du C, Zhang Z, Zheng YH, Wang X . ANP32A and ANP32B are key factors in the Rev-dependent CRM1 pathway for nuclear export of HIV-1 unspliced mRNA. J Biol Chem. 2019 Oct 18 294(42):15346-15357.
22. Yang L, Wang L, Yang Z, Jin H, Zou Q, Zhan Q, Tang Y, Tao Y, Lei L, Jing Y, Jiang X, Zhang L . Up-regulation of EMT-related gene VCAN by NPM1 mutant-driven TGF-β/cPML signalling promotes leukemia cell invasion. J Cancer. 2019 Oct 21 10(26):6570-6583.
23. Wang C, Su L, Shao YM, Chen WZ, Bu N, Hao R, Ma LY, Hussain L, Lu XY, Wang QQ, Naranmandura H . Involvement of PML-I in reformation of PML nuclear bodies in acute promyelocytic leukemia cells by leptomycin B. TOXICOL APPL PHARM . 2019 Dec 1 384:114775.
24. Lingcai Zhao, Huizhi Xia, Jingjin Huang, Yiqing Zheng, Chang Liu, Juan Su, Jihui Ping . Features of Nuclear Export Signals of NS2 Protein of Influenza D Virus Viruses. 2020 Sep 29;12(10):1100.
25. Yarui Zhang, Guomin Ou, Zhujing Ye, Zhou Zhou, Qianlin Cao, Mengting Li, Jingdong Wang, Jianping Cao, Hongying Yang . RPRM negatively regulates ATM levels through its nuclear translocation on irradiation mediated by CDK4/6 and IPO11 iScience. 2022 Sep 13;25(10):105115.

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