Caspase 3 抑制剂 Ac-DEVD-CHO

产品编号	产品名称	包装
C1206-10mM	Caspase 3抑制剂Ac-DEVD-CHO	10mM×0.1ml
C1206-5mg	Caspase 3抑制剂Ac-DEVD-CHO	5mg

产品简介：

- Caspase 3抑制剂Ac-DEVD-CHO (Caspase 3 Inhibitor Ac-DEVD-CHO)是一种非常强的Caspase 3抑制剂，可以抑制由Caspase 3激活导致的细胞凋亡。也可以抑制Caspase 7。
- 本Caspase 3抑制剂Ac-DEVD-CHO是一种可逆的Caspase 3抑制剂，分子式为N-Acetyl-Asp-Glu-Val-Asp-CHO，即$C_{20}H_{30}N_4O_{11}$，分子量为502.5，纯度>95%。
- Caspase 3抑制剂Ac-DEVD-CHO是最常用的细胞凋亡抑制剂之一，常用于观察特定的细胞凋亡是否通过Caspase 3激活来介导。
- Caspase 3抑制剂Ac-DEVD-CHO可以用于抑制培养细胞内的Caspase 3，也可用于抑制体外纯化或粗抽提的Caspase 3。在体外对Casapse 3的IC50＝200pM。
- 本Caspase 3抑制剂Ac-DEVD-CHO10mM包装产品配制在DMSO中，可以直接使用。5mg包装为粉末装。

包装清单：

产品编号	产品名称	包装
C1206-10mM	Caspase 3抑制剂Ac-DEVD-CHO	10mM×0.1ml
C1206-5mg	Caspase 3抑制剂Ac-DEVD-CHO	5mg
—	说明书	1份

保存条件：

-20ºC保存，一年有效。

注意事项：

- 如果每次使用量少，使用次数较多，请适当分装。反复冻融会影响本抑制剂的使用效果。
- 如果希望适当稀释后再分装保存，请使用DMSO进行稀释。
- 本Caspase 3抑制剂Ac-DEVD-CHO在4ºC、冰浴等较低温度情况下会凝固而粘在离心管管底、管壁或管盖内，可以20-25ºC水浴温育片刻至全部融解后使用。
- 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. Caspase 3抑制剂Ac-DEVD-CHO在终浓度为20-100μM时可以非常显著地抑制大多数细胞凋亡诱导剂诱导的细胞凋亡。Caspase 3抑制剂Ac-DEVD-CHO抑制细胞凋亡的最佳浓度需针对特定的细胞凋亡自行摸索。
2. Caspase 3抑制剂Ac-DEVD-CHO用于抑制细胞凋亡时至少需要和细胞凋亡诱导剂同时加入，或者需在细胞凋亡诱导剂加入前10-30分钟加入到细胞培养液中，或参考相关文献进行。
3. 如果用于抑制纯化或粗抽提的Caspase，推荐Caspase 3抑制剂Ac-DEVD-CHO的使用浓度为100nM。

使用本产品的文献：

1. Zhao Y, Jiang W, Li B, Yao Q, Dong J, Cen Y, Pan X, Li J, Zheng J, Pang X, Zhou H. Artesunate enhances radiosensitivity of human non-small cell lung cancer A549 cells via increasing NO production to induce cell cycle arrest at G2/M phase. Int Immunopharmacol. 2011 Dec;11(12):2039-46.
2. Li X, Liu D, Liu X, Jiang W, Zhou W, Yan W, Cen Y, Li B, Cao G, Ding G, Pang X, Sun J, Zheng J, Zhou H. CpG ODN107 potentiates radiosensitivity of human glioma cells via TLR9-mediated NF-κBactivation and NO production. Tumour Biol. 2012 Oct;33(5):1607-18.
3. Khan M, Yu B, Rasul A, Al Shawi A, Yi F, Yang H, Ma T. Jaceosidin Induces Apoptosis in U87 Glioblastoma Cells through G2/M Phase Arrest. Evid Based Complement Alternat Med. 2012 Jun 9:6(21):3754-3765.
4. He X, Nie H, Hong Y, Sheng C, Xia W, Ying W. SIRT2 activity is required for the survival of C6 glioma cells. Biochem Biophys Res Commun. 2012 Jan 6;417(1):468-72.
5. Hu X, Li H, Luo S, Liu T, Jiang T, Liu S. Thiol and pH dual-responsive dynamic covalent shell cross-linked micelles for triggered release of chemotherapeutic drugs. Polym. Chem. 2013;4:695-706.

6. Tang Q, Li G, Wei X, Zhang J, Chiu JF, Hasenmayer D, Zhang D, Zhang H. Resveratrol-induced apoptosis is enhanced by inhibition of autophagy in esophageal squamous cell carcinoma. Cancer Lett. 2013 Aug 19;336(2):325-37.
7. Wang Y, Yang J, Chen L, Wang J, Wang Y, Luo J, Pan L, Zhang X. Artesunate induces apoptosis through caspase-dependent and -independent mitochondrial pathways in human myelodysplastic syndrome SKM-1 cells. Chem Biol Interact. 2014 Apr 3;219C:28-36.
8. Lu M, Sun L, Zhou J, Yang J. Dihydroartemisinin induces apoptosis in colorectal cancer cells through the mitochondria-dependent pathway. Tumour Biol. 2014 Jun;35(6):5307-14.
9. Yuan XH, Yang BQ, Hu Y, Fan YY, Zhang LX, Zhou JC, Wang YQ, Lu CL, Ma X. Dexamethasone altered steroidogenesis and changed redox status of granulosa cells. Endocrine. 2014 Nov;47(2):639-47.
10. Yang RH, Lin J, Hou XH, Cao R, Yu F, Liu HQ, Ji AL, Xu XN, Zhang L, Wang F. Effect of docosahexaenoic acid on hippocampal neurons in high-glucose condition: involvement of PI3K/AKT/nuclear factor-κB-mediated inflammatory pathways. Neuroscience. 2014 Aug 22;274:218-28.
11. Wang LH, Yang JY, Yang SN, Li Y, Ping GF, Hou Y, Cui W, Wang ZZ, Xiao W, Wu CF. Suppression of NF-κB signaling and P-glycoprotein function by gambogic acid synergistically potentiates adriamycin -induced apoptosis in lung cancer. Curr Cancer Drug Targets. 2014 Jan;14(1):91-103.
12. Deng S, Tang S, Zhang S, Zhang C, Wang C, Zhou Y, Dai C, Xiao X.Furazolidone induces apoptosis through activating reactive oxygen species-dependent mitochondrial signaling pathway and suppressing PI3K/Akt signaling pathway in HepG2 cells.Food Chem Toxicol. 2015 Jan;75:173-86.
13. Wang C, Li T, Tang S, Zhao D, Zhang C, Zhang S, Deng S, Zhou Y, Xiao X. Thapsigargin induces apoptosis when autophagy is inhibited in HepG2 cells and both processes are regulated by ROS-dependent pathway.Environ Toxicol Pharmacol. 2015 Dec 9;41:167-179.
14. Li Z, Yang H, Wu X, Guo K, Li J. Some aspects of salinity responses in peppermint (Mentha × piperita L.) to NaCl treatment.Protoplasma. 2015 May; 252(3): 885-99.
15. Zhao C, Su G, Wang X, Zhang X, Guo S, Zhao Y. Antitumor activity of ginseng sapogenins, 25-OH-PPD and 25-OCH3-PPD, on gastric cancer cells. Biotechnol Lett. 2016 Jan;38(1):43-50.
16. Dong YP, Chen G, Zhou Y, Zhu JJ. Electrochemiluminescent Sensing for Caspase-3 Activity Based on Ru(bpy)3(2+)-Doped Silica Nanoprobe.Anal Chem. 2016 Feb 2;88(3):1922-9.
17. Wang C, Li T, Tang S, Zhao D, Zhang C, Zhang S, Deng S, Zhou Y, Xiao X. Thapsigargin induces apoptosis when autophagy is inhibited in HepG2 cells and both processes areregulated by ROS-dependent pathway. Environ Toxicol Pharmacol. 2016 Jan;41:167-79.
18. Zan J, Liu J, Zhou JW, Wang HL, Mo KK, Yan Y, Xu YB, Liao M, Su S, Hu RL, Zhou JY. Rabies virus matrix protein induces apoptosis by targeting mitochondria. Exp Cell Res. 2016 Sep 10;347(1):83-94.
19. Wan XK, Yuan SL, Wang YC, Tao HX, Jiang W, Guan ZY, Cao C, Liu CJ. Helicobacter pylori inhibits the cleavage of TRAF1 via a CagA-dependent mechanism. World J Gastroenterol. 2016 Dec 28;22(48):10566-10574.
20. Zhou XY,Xu XM,Wu SY,Zhang ZC,Wang F,Yang YL,Li M,Wei XZ.Low-intensity pulsed ultrasound promotes spinal fusion and enhances migration and proliferation of MG63s through sonic hedgehog signaling pathway.Bone . 2018 May;110:47-57
21. Fan Y,Chiu JF,Liu J,Deng Y,Xu C,Zhang J,Li G.Resveratrol induces autophagy-dependent apoptosis in HL-60 cells.BMC Cancer . 2018 May 22;18(1):581
22. Wang J,Zhou Z,Zhang F,Xu H,Chen W,Jiang T.A novel nanocomposite based on fluorescent turn-on gold nanostars for near-infrared photothermal therapy and self-theranostic caspase-3 imaging of glioblastoma tumor cell.COLLOID SURFACE B . 2018 Oct 1;170:303-311
23. Qian Y,Wang Y,Jia F,Wang Z,Yue C,Zhang W,Hu Z,Wang W.Tumor-microenvironment controlled nanomicelles with AIE property for boosting cancer therapy and apoptosis monitoring.Biomaterials. 2019 Jan;188:96-106
24. Yu X,Yin H,Peng H,Lu G,Liu Z,Dang Z.OPFRs and BFRs induced A549 cell apoptosis by caspase-dependent mitochondrial pathway.Chemosphere. 2019 Apr;221:693-702
25. Li P,Ma R,Dong L,Liu L,Zhou G,Tian Z,Zhao Q,Xia T,Zhang S,Wang A.Autophagy impairment contributes to PBDE-47-induced developmental neurotoxicity and its relationship with apoptosis.Theranostics. 2019 Jun 9;9(15):4375-4390
26. Yu B,Wang AH,Zhou K,Chai LJ,Liu L.Molecular Pathway of Psoralidin-Induced Apoptosis in HepG2 Cell Line.Chin J Integr Med. 2019 Oct;25(10):757-762
27. Wang F,Chen X,Yuan D,Yi Y,Luo Y.Golgi reassembly and stacking protein 65 downregulation is required for the anti-cancer effect of dihydromyricetin on human ovarian cancer cells.PLoS One. 2019 Nov 26;14(11):e0225450.
28. Xiaoli Gao,Qiaoli Yang,Xiaoyu Huang,Zunqiang Yan,Shengwei Zhang,Ruirui Luo,Pengfei Wang,Wei Wang,Kaihui Xie,Tiantuan Jiang,Shuangbao Gun.Effects of Clostridium perfringens beta2 toxin on apoptosis, inflammation, and barrier function of intestinal porcine epithelial cells MICROB PATHOGENESIS. 2020 Oct;147:104379.;doi: 10.1016/j.micpath.2020.104379
29. Tao Song,Mingyu Zhang,Jun Wu,Fenghua Chen,Ying Wang,Yujie Ma,Zhijie Dai.Glioma progression is suppressed by Naringenin and APO2L combination therapy via the activation of apoptosis in vitro and in vivo INVEST NEW DRUG. 2020 Dec;38(6):1743-1754.;doi: 10.1007/s10637-020-00979-2

Version 2021.09.01