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

碧云天网站 微信公众号

胰酶细胞消化液(0.05%胰酶)

产品编号	产品名称	包装
C0202	胰酶细胞消化液(0.05%胰酶)	100ml

产品简介：

- 碧云天生产的胰酶细胞消化液(Trypsin-EDTA Solution)含0.05%胰酶和0.02%EDTA, pH值为7.2-7.8。该消化液经过过滤除菌，可以直接用于培养细胞的消化，或者一些组织的消化。
- 本胰酶细胞消化液具有方便快速的特点，通常室温消化1分钟左右就可以消化下大多数贴壁细胞。

包装清单：

产品编号	产品名称	包装
C0202	胰酶细胞消化液(0.05%胰酶)	100ml
—	说明书	1份

保存条件：

4ºC保存，一年有效。短期内不使用，推荐-20ºC保存，-20ºC可以保存更长时间。

注意事项：

- 在使用胰酶细胞消化液的过程中要特别注意避免消化液被细菌污染。
- 胰酶细胞消化液消化细胞时间不宜过长，否则细胞铺板后生长状况会较差。
- 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. 贴壁细胞的消化：

a. 吸去培养液，用无菌的PBS、Hanks液或无血清培养液洗涤细胞一次，以去除残余的血清。

b. 加入少量胰酶细胞消化液，略盖过细胞即可，室温放置30秒至2分钟。不同的细胞消化时间有所不同。

c. 显微镜下观察，细胞明显收缩，并且肉眼观察培养器皿底部发现细胞的形态发生明显的变化；或者用枪吹打细胞发现细胞刚好可以被吹打下来。此时吸除胰酶细胞消化液。加入含血清的完全细胞培养液，吹打下细胞，即可直接用于后续实验。

d. 如果发现消化不足，则加入胰酶细胞消化液重新消化。
如果发现细胞消化时间过长，未及吹打细胞，细胞已经有部分直接从培养器皿底部脱落，直接用胰酶细胞培养液把细胞全部吹打下来。1000-2000g离心1分钟，沉淀细胞，尽量去除胰酶细胞消化液后，加入含血清的完全培养液重新悬浮细胞，即可用于后续实验。

2. 组织的消化：

a. 不同的组织需要消化的时间相差很大，通常以消化后可以充分打散组织为宜。

附录：不同胰酶细胞消化液的比较和选择

1. 如果希望消化能力比较强，推荐选择C0201 胰酶细胞消化液(0.25%胰酶)和C0203 胰酶细胞消化液(0.25%胰酶，含酚红)，这两种胰酶细胞消化液都含有EDTA，消化能力相对更强一些。
2. 如果希望观察比较方便，推荐选择含酚红的C0203 胰酶细胞消化液(0.25%胰酶，含酚红)和C0207 胰酶细胞消化液(0.25%胰酶，含酚红，不含EDTA)。
3. 对于酚红可能会干扰后续的测试分析，推荐选择不含酚红的C0201 胰酶细胞消化液(0.25%胰酶)和C0205 胰酶细胞消化液(0.25%胰酶，不含EDTA)。
4. 对于EDTA可能会干扰后续的测试分析时，推荐选择不含EDTA的C0205 胰酶细胞消化液(0.25%胰酶，不含EDTA)和C0207 胰酶细胞消化液(0.25%胰酶，含酚红，不含EDTA)。
5. 对于胰酶特别敏感的细胞，即对于消化时间特别快、消化时间比较难控制的情况，推荐选择C0202胰酶细胞消化液(0.05%胰酶)或C0204 胰酶细胞消化液(0.05%胰酶，含酚红)。

相关产品：

产品编号	产品名称	包装

C0201	胰酶细胞消化液(0.25%胰酶)	100ml
C0202	胰酶细胞消化液(0.05%胰酶)	100ml
C0203	胰酶细胞消化液(0.25%胰酶，含酚红)	100ml
C0204	胰酶细胞消化液(0.05%胰酶，含酚红)	100ml
C0205	胰酶细胞消化液(0.25%胰酶，不含EDTA)	100ml
C0207	胰酶细胞消化液(0.25%胰酶，含酚红，不含EDTA)	100ml

使用本产品的文献：

1. Zhang M, Zhang H, Sun C, Shan X, Yang X, Li-Ling J, Deng Y. Targeted constitutive activation of signal transducer and activator of transcription 3 in human hepatocellular carcinoma cells by cucurbitacin B. Cancer Chemother Pharmacol. 2009 Mar;63(4):635-42.
2. Wang Q, Zhu J, Zou L, Yang Y. Role of axonal guidance factor netrin-1 in human placental vascular growth. J Huazhong Univ Sci Technolog Med Sci. 2011 Apr;31(2):246-50.
3. Qian-hua W, Shao-ping Z, Jian-wen Z, Yun Y, Li Z. Reduced expression of netrin-1 is associated with fetal growth restriction. Mol Cell Biochem. 2011 Apr;350(1-2):81-7
4. Wan SY, Zhang TF, Ding Y. Galectin-3 enhances proliferation and angiogenesis of endothelial cells differentiated from bonemarrow mesenchymal stem cells. Transplant Proc. 2011 Dec;43(10):3933-8.
5. Li Y, Yao Y, Sheng Z, Yang Y, Ma G. Dual-modal tracking of transplanted mesenchymal stem cells after myocardial infarction. Int J Nanomedicine. 2011;6:815-23.
6. Wang Q, Zhu J, Zou L, Yang Y. Role of axonal guidance factor netrin-1 in human placental vascular growth. J Huazhong Univ Sci Technolog Med Sci. 2011 Apr;31(2):246-50.
7. Liu M, Sun Y, Liu Y, Yuan M, Zhang Z, Hu W. Modulation of the differentiation of dental pulp stem cells by different concentrations of β-glycerophosphate. Molecules. 2012 Jan 31;17(2):1219-32.
8. Yi C, Zhong H, Tong S, Cao X, Firempong CK, Liu H, Fu M, Yang Y, Feng Y, Zhang H, Xu X, Yu J. Enhanced oral bioavailability of a sterol-loaded microemulsion formulation of Flammulina velutipes, a potential antitumor drug. Int J Nanomedicine. 2012;7:5067-78.
9. Feng X, Zhou Q, Liu C, Tao ML. Drug screening study using glioma stem-like cells. Mol Med Rep. 2012 Nov;6(5):1117-20.
10. Li J, Zhang G, Liu T, Gu H, Yan L, Chen B. Construction of a novel vector expressing the fusion suicide gene yCDglyTK and hTERT-shRNA and its antitumoreffects. Exp Ther Med. 2012 Sep;4(3):442-448.
11. Wu X, Zhao J, Yu S, Chen Y, Wu J, Zhao Y. Sulforaphane protects primary cultures of cortical neurons against injury induced by oxygen-glucosedeprivation/reoxygenation via antiapoptosis. Neurosci Bull. 2012 Oct;28(5):509-16.
12. Yan Y, He T, Shen Y, Chen X, Diao B, Li Z, Zhou F, Xing YQ. Modeling of diseases of retinal ischemia in vitro: possible participation of autocrine vascular endothelial growthfactor signaling. Ophthalmic Res. 2013;49(2):90-9.
13. Wu YR, Gong QF, Fang H, Liang WW, Chen M, He RJ. Effect of Sophora flavescens on non-specific immune response of tilapia (GIFT Oreochromis niloticus) and disease resistance against Streptococcus agalactiae. Fish Shellfish Immunol. 2013 Jan;34(1):220-7.
14. Wang HG, Huang XD, Shen P, Li LR, Xue HT, Ji GZ. Anticancer effects of sodium butyrate on hepatocellular carcinoma cells in vitro. Int J Mol Med. 2013 Apr;31(4):967-74.
15. Jiao H, Zhang Z, Ma Q, Fu W, Liu Z. Mechanism underlying the inhibitory effect of Apelin-13 on glucose deprivation-induced autophagy in ratcardiomyocytes. Exp Ther Med. 2013 Mar;5(3):797-802.
16. Feng C, Xu Z, Li Z, Zhang D, Liu Q, Lu L. Down-regulation of Wnt10a by RNA interference inhibits proliferation and promotes apoptosis in mouse embryonic palatal mesenchymal cells through Wnt/β-catenin signaling pathway. J Physiol Biochem. 2013 Dec;69(4):855-63.
17. Liu G, Kong Z, Shen Y. Synthesis, characterization, and in vitro antiproliferative activity of novel β-elemene monosubstituted derivatives. Medicinal Chemistry Research. 2013 Jul;(7):3536-40.
18. Sun SN, Jia WD, Chen H, Ma JL, Ge YS, Yu JH, Li JS. Docosahexaenoic acid (DHA) induces apoptosis in human hepatocellular carcinoma cells. Int J Clin Exp Pathol. 2013;6(2):281-9.
19. Zheng LN, Wang M, Wang B, Chen HQ, Ouyang H, Zhao YL, Chai ZF, Feng WY. Determination of quantum dots in single cells by inductively coupled plasma mass spectrometry. Talanta. 2013 Nov 15;116:782-7.
20. Liu J, Mao Z, Huang J, Xie S, Liu T, Mao Z. Blocking the NOTCH pathway can inhibit the growth of CD133-positive A549 cells and sensitize to chemotherapy. Biochem Biophys Res Commun. 2014 Feb 21;444(4):670-5.
21. Wang HW, Wang JQ, Zheng BQ, Li SL, Zhang YD, Li FD, Zheng N. Cytotoxicity induced by ochratoxin A, zearalenone, and α-zearalenol: effects of individual and combined treatment. Food Chem Toxicol. 2014 Sep;71:217-24.
22. Sun L, Li H, Qu L, Zhu R, Fan X, Xue Y, Xie Z, Fan H. Immobilized lentivirus vector on chondroitin sulfate-hyaluronate acid-silk fibroin hybrid scaffold for tissue-engineered ligament-bone junction. Biomed Res Int. 2014;2014:816979.
23. Wei X, Zhu X, Hu N, Zhang X, Sun T, Xu J, Bian X. Baicalin attenuates angiotensin II-induced endothelial dysfunction. Biochem Biophys Res Commun. 2015 Sep 11;465(1):101-7.
24. Bian YY, Guo J, Majeed H, Zhu KX, Guo XN, Peng W, Zhou HM. Ferulic acid renders protection to HEK293 cells against oxidative damage and apoptosis induced by hydrogenperoxide. In Vitro Cell Dev Biol Anim. 2015 Aug;51(7):722-9.
25. Cao Z, Yu W, Li W, Cheng F, Rao T, Yao X, Zhang X, Larré S. Oxidative Damage and Mitochondrial Injuries Are Induced byVarious Irrigation Pressures in Rabbit Models of Mildand Severe Hydronephrosis. PLoS One. 2015 Jun 19;10(6):e0127143.
26. Guo Z, Li CS, Wang CM, Xie YJ, Wang AL. CSE/H2S system protects mesenchymalstemcells from hypoxia and serum deprivation induced apoptosis viamitochondrial injury, endoplasmicreticulumstress and PI3K/Akt activation pathways. Mol Med Rep. 2015 Aug;12(2):2128-34.
27. Zheng LN, Wang M, Zhao LC, Sun BY, Wang B, Chen HQ, Zhao YL, Chai ZF, Feng WY. Quantitative analysis of Gd@C82(OH)22 and cisplatin uptake in single cells by inductively coupled plasma massspectrometry. Anal Bioanal Chem. 2015 Mar;407(9):2383-91.
28. Yuan-Yuan Bian Jia Guo Ke-Xue Zhu Xiao-Na Guo Wei Peng Hamid Majeeda and Hui-Ming Zhou. Macroporous adsorbent resin-based wheat bran polyphenol extracts inhibition effects on H 2O 2-induced oxidative damage in HEK293 cells. RSC Advances. 2015;5(27): 20931-8.
29. Peng Y, Fu ZZ, Guo CS, Zhang YX, Di Y, Jiang B, Li QW. Effects and Mechanism of Baicalin on Apoptosis of Cervical Cancer HeLa Cells In -vitro. Iran J Pharm Res. 2015 Winter;14(1):251-61.
30. Peng Y, Guo C, Yang Y, Li F, Zhang Y, Jiang B, Li Q. Baicalein induces apoptosis of human cervical cancer HeLa cells in vitro. Mol Med Rep. 2015 Mar;11(3):2129-34.
31. Sun LH, Lei MY, Zhang NY, Gao X, Li C, Krumm CS, Qi DS. Individual and combined cytotoxic effects of aflatoxinB, zearalenone, deoxynivalenol and fumonisinB1 on BRL3A rat liver cells. Toxicon. 2015 Mar;95:6-12.
32. Li H, Fan J, Sun L, Liu X, Cheng P, Fan H. Functional regeneration of ligament-bone interface using a triphasic silk-based graft. Biomaterials. 2016 Nov;106:180-92.
33. Yang M, Pi H, Li M, Xu S, Zhang L, Xie J, Tian L, Tu M, He M, Lu Y, Yu Z, Zhou Z. Autophagy Induction Contributes to Cadmium Toxicity in Mesenchymal Stem Cells viaAMPK/FOXO3a/BECN1 Signaling. Toxicol Sci. 2016 Nov;154(1):101-114.
34. Li J, Li X, Cai W, Liu Y. Comparison of different polar compounds-induced cytotoxicity in human hepatocellular carcinomaHepG2 cells. Lipids Health Dis. 2016 Feb 16;15:30.
35. Gao X, Xu H, Shang J, Yuan L, Zhang Y, Wang L, Zhang W, Luan X, Hu G, Chu H, Zhu T, Jia G. Ozonized carbon black induces mitochondrial dysfunction and DNA damage. Environ Toxicol. 2017 Mar;32(3):944-955
36. Junqing Gan,Shumin Li,Yu Meng,Yuanyu Liao,Mingxia Jiang,Ling Qi,Yanjing Li,Yuxian Bai. The influence of photodynamic therapy on the Warburg effect in esophageal cancer cells LASER MED SCI. 2020

Oct;35(8):1741-1750.;doi: 10.1007/s10103-020-02966-8..

Version 2021.09.01