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## Hoechst 33342 染色液

产品编号	产品名称	包装
C1025	Hoechst 33342染色液	10ml

### 产品简介:

- Hoechst 33342，也称bisBenzimide H 33342或HOE 33342。分子式为C<sub>27</sub>H<sub>28</sub>N<sub>6</sub>O·3HCl·3H<sub>2</sub>O，分子量为615.99，CAS Number 23491-52-3。
- Hoechst 33342是一种可以穿透细胞膜的蓝色荧光染料，对细胞的毒性较低。
- Hoechst 33342染色常用于细胞凋亡检测，染色后用荧光显微镜观察或流式细胞仪检测。Hoechst 33342也常用于普通的细胞核染色，或常规的DNA染色。
- Hoechst 33342的最大激发波长为346nm，最大发射波长为460nm；Hoechst 33342和双链DNA结合后，最大激发波长为350nm，最大发射波长为461nm。
- 本Hoechst 33342染色液可直接用于固定细胞或组织的细胞核染色，也可直接用于活细胞或组织的细胞核染色。

### 包装清单:

产品编号	产品名称	包装
C1025	Hoechst 33342染色液	10ml
—	说明书	1份

### 保存条件:

-20°C避光保存，一年有效。

### 注意事项:

- 本Hoechst 33342染色液的浓度经过碧云天的优化，确保可以满足各种常规染色的需要。如需使用特定浓度的Hoechst 33342，请选购碧云天的Hoechst 33342 (C1022)。如需染色活细胞或培养的组织，请选购碧云天的Hoechst 33342活细胞染色液(100X) (C1027、C1028或C1029)，效果更佳。
- 荧光染料都存在淬灭的问题，建议染色后尽量当天完成检测。活细胞或组织染色后宜立即观察。
- 为减缓荧光淬灭可以使用抗荧光淬灭片液。抗荧光淬灭片液(P0126)可以向碧云天订购。
- 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:

#### 1. 对于固定的细胞或组织:

- a. 对于细胞或组织样品，固定后，适当洗涤去除固定剂。随后如果需要进行免疫荧光染色，则先进行免疫荧光染色，染色完毕后再按后续步骤进行 Hoechst 33342 染色。如果不需要进行其它染色，则直接进行后续的 Hoechst 33342 染色。
- b. 对于贴壁细胞或组织切片，加入少量 Hoechst 33342 染色液，覆盖住样品即可。对于悬浮细胞，至少加入待染色样品体积 3 倍的染色液，混匀。室温放置 3-5 分钟。
- c. 吸除 Hoechst 33342 染色液，用 TBST、PBS 或生理盐水洗涤 2-3 次，每次 3-5 分钟。
- d. 直接在荧光显微镜下观察或封片后荧光显微镜下观察。细胞发生凋亡时，会看到凋亡细胞的细胞核呈致密浓染，或呈碎块状致密浓染。

#### 2. 对于活细胞或培养的组织:

- a. 加入适当量 Hoechst 33342 染色液，必须充分覆盖住待染色的样品，通常对于六孔板一个孔需加入 1ml 染色液，对于 96 孔板一个孔需加入 100 微升染色液。
- b. 在适宜于细胞培养的温度培养 20-30 分钟。弃染色液，用 PBS 或培养液洗涤 2-3 次即可进行荧光检测。细胞发生凋亡时，在荧光显微镜下观察会看到凋亡细胞的细胞核呈致密浓染，或呈碎块状致密浓染。

### 相关产品:

产品编号	产品名称	包装
C1002	DAPI	5mg/ml×0.2ml
C1005	DAPI染色液	10ml

C1006	DAPI染色液	50ml
C1011	Hoechst 33258	10mg
C1017	Hoechst 33258染色液	10ml
C1018	Hoechst 33258染色液	50ml
C1022	Hoechst 33342	10mg
C1025	Hoechst 33342染色液	10ml
C1026	Hoechst 33342染色液	50ml
C1027	Hoechst 33342活细胞染色液(100X)	0.1ml
C1028	Hoechst 33342活细胞染色液(100X)	0.5ml
C1029	Hoechst 33342活细胞染色液(100X)	3ml

## 使用本产品的文献：

1. Liu W, Meng Q, Sun Y, Wang C, Huo X, Liu Z, Sun P, Sun H, Ma X, Liu K. Targeting P-Glycoprotein: Nelfinavir Reverses Adriamycin Resistance in K562/ADR Cells. *CELL PHYSIOL BIOCHEM.* 2018;51(4):1616-1631.
2. Su W, Tang J, Wang Y, Sun S, Shen Y, Yang H. Long non-coding RNA highly up-regulated in liver cancer promotes epithelial-to-mesenchymal transition process in oral squamous cell carcinoma. *J Cell Mol Med.* 23(4):2645-2655.
3. Sun J, Guo Y, Zhang Q, Bu S, Li B, Wang Q, Lai D. Chronic restraint stress disturbs meiotic resumption through APC/C-mediated cyclin B1 excessive degradation in mouse oocytes. *Cell Cycle.* 2018;17(13):1591-1601.
4. Liu H, Chen J, Li X, Deng Z, Gao P, Li J, Ren T, Huang L, Yang Y, Zhong S. Amphiphatic  $\beta$ -cyclodextrin nanocarriers serve as intelligent delivery platform for anticancer drug. *COLLOID SURFACE B.* 180:429-440.
5. Wang Y, Qin Y, Guo T, Tang C, Liu L, Gao D. High Concentration of Glial Cell Line-Derived Neurotrophic Factor Protects Primary Astrocytes from Apoptosis. *DEV NEUROSCI-BASEL.* 2018;40(2):134-144.
6. Sun Y, Wang C, Meng Q, Liu Z, Huo X, Sun P, Sun H, Ma X, Peng J, Liu K. Targeting P-glycoprotein and SORCIN: Dihydromyricetin strengthens anti-proliferative efficiency of adriamycin via MAPK/ERK and  $Ca^{2+}$ -mediated apoptosis pathways in MCF-7/ADR and K562/ADR. *J Cell Physiol.* 2018 Apr;233(4):3066-3079.
7. Zeng Z, Liu Y, Zheng W, Liu L, Yin H, Zhang S, Bai H, Hua L, Wang S, Wang Z, Li X, Xiao J, Yuan Q, Wang Y. MicroRNA-129-5p alleviates nerve injury and inflammatory response of Alzheimer's disease via downregulating SOX6. *Cell Cycle.* 18(22):3095-3110.
8. Hu YP, Wu ZB, Jiang L, Jin YP, Li HF, Zhang YJ, Ma Q, Ye YY, Wang Z, Liu YC, Chen HZ, Liu YB. STYK1 promotes cancer cell proliferation and malignant transformation by activating PI3K-AKT pathway in gallbladder carcinoma. *INT J BIOCHEM CELL B.* 2018 Apr;97:16-27.
9. Li X, Liu H, Li J, Deng Z, Li L, Liu J, Yuan J, Gao P, Yang Y, Zhong S. Micelles via self-assembly of amphiphilic beta-cyclodextrin block copolymers as drug carrier for cancer therapy. *COLLOID SURFACE B.* 183:110425.
10. Liu X, Qiu Z, Wang Z, Zuo W, Gong Z, Liu C, Zeng Q, Qian Y, Jiang L, Li Y, Bu Y, Hu G. NFBD1/MDC1 participates in the regulation of proliferation and apoptosis in human laryngeal squamous cell carcinoma. *Clin Transl Oncol.* 2018 Apr;20(4):534-541.
11. Zhao C, Yao X, Chen X, Wu W, Xi F, Yang G, Yu T. Knockdown of ubiquitin D inhibits adipogenesis during the differentiation of porcine intramuscular and subcutaneous preadipocytes. *CELL PROLIFERAT.* 2018 Apr;51(2):e12401.
12. Chen H, Cao J, Zhu Z, Zhang G, Shan L, Yu P, Wang Y, Sun Y, Zhang Z. A Novel Tetramethylpyrazine Derivative Protects Against Glutamate-Induced Cytotoxicity Through PGC1 $\alpha$ /Nrf2 and PI3K/Akt Signaling Pathways. *FRONT NEUROSCI-SWITZ.* 2018 Aug 15;12:567.
13. Zhai QY, Ge W, Wang JJ, Sun XF, Ma JM, Liu JC, Zhao Y, Feng YZ, Dyce PW, De Felici M, Shen W. Exposure to Zinc oxide nanoparticles during pregnancy induces oocyte DNA damage and affects ovarian reserve of mouse offspring. *AGING-US.* 2018 Aug 28;10(8):2170-2189.
14. Liu Y, Guan X, Li C, Ni F, Luo S, Wang J, Zhang D, Zhang M, Hu Q. HSV-2 glycoprotein J promotes viral protein expression and virus spread. *Virology.* 2018 Dec;525:83-95.
15. Sun ZY, Zhang P, Wang JJ, Liu JC, Li L, Shen W, Zhai QY. Melatonin alleviates meiotic defects in fetal mouse oocytes induced by Di (2-ethylhexyl) phthalate in vitro. *AGING-US.* 2018 Dec 26;10(12):4175-4187.
16. Miao X, Gu Z, Liu Y, Jin M, Lu Y, Gong Y, Li L, Li C. The glucagon-like peptide-1 analogue liraglutide promotes autophagy through the modulation of 5'-AMP-activated protein kinase in INS-1  $\beta$ -cells under high glucose conditions. *Peptides.* 2018 Feb;100:127-139.
17. Liu Y, Jiang P, Wang G, Liu X, Luo S. Downregulation of RFX1 predicts poor prognosis of patients with small hepatocellular carcinoma. *EJSO-EUR J SURG ONC.* 2018 Jul;44(7):1087-1093.
18. Yu J, Chen Z, Li Y, Du M, Yan F, Zheng H. Echogenic Chitosan Nanodroplets for Spatiotemporally Controlled Gene Delivery. *J BIOMED NANOTECHNOL.* 2018 Jul 1;14(7):1287-1297.
19. Zhang GL, Song JL, Zhou Y, Zhang RQ, Cheng SF, Sun XF, Qin GQ, Shen W, Li L. Differentiation of sow and mouse ovarian granulosa cells exposed to zearalenone in vitro using RNA-seq gene expression. *TOXICOL APPL PHARM.* 2018 Jul 1;350:78-90.
20. Kang X, Yang MY, Shi YX, Xie MM, Zhu M, Zheng XL, Zhang CK, Ge ZL, Bian XT, Lv JT, Wang YJ, Zhou BH, Tang KL. Interleukin-15 facilitates muscle regeneration through modulation of fibro/adipogenic progenitors. *Cell Commun Signal.* 2018 Jul 20;16(1):42.
21. Zhang GL, Song JL, Ji CL, Feng YL, Yu J, Nyachoti CM, Yang GS. Zearalenone Exposure Enhanced the Expression of Tumorigenesis Genes in Donkey Granulosa Cells via the PTEN/PI3K/AKT Signaling Pathway. *Front Genet.* 2018 Jul 31;9:293.
22. Yang B, Bai Y, Yin C, Qian H, Xing G, Wang S, Li F, Bian J, Aschner M, Lu R. Activation of autophagic flux and the Nrf2/ARE signaling pathway by hydrogen sulfide protects against acrylonitrile-induced neurotoxicity in primary rat astrocytes. *Arch Toxicol.* 2018 Jun;92(6):2093-2108.
23. Ying C, Xiao BD, Qin Y, Wang BR, Liu XY, Wang RW, Fang L, Yan H, Zhou XM, Wang YG. GOLPH2-regulated oncolytic adenovirus, GD55, exerts strong killing effect on human prostate cancer stem-like cells in vitro and in vivo. *Acta Pharmacol Sin.* 2018 Mar;39(3):405-414.
24. Wang S, Cheng Y, Gao Y, He Z, Zhou W, Chang R, Peng Z, Zheng Y, Duan C, Zhang C. SH2B1 promotes epithelial-mesenchymal transition through the IRS1/ $\beta$ -catenin signaling axis in lung adenocarcinoma. *MOL CARCINOGEN.* 2018 May;57(5):640-652.
25. Chu P, He L, Xiong L, Luo L, Huang R, Liao L, Li Y, Zhu Z, Wang Y. Molecular cloning, expression analysis and localization pattern of the MST family in grass carp (*Ctenopharyngodon idella*). *FISH SHELLFISH IMMUN.* 2018 May;76:316-323.
26. Han B, Zhang YY, Xu K, Bai Y, Wan LH, Miao SK, Zhang KX, Zhang HW, Liu Y, Zhou LM. NUDCD1 promotes metastasis through inducing EMT and inhibiting apoptosis in colorectal cancer. *Am J Cancer Res.* 2018 May 1;8(5):810-823. eCollection 2018.
27. Gu LL, Shen ZL, Li YL, Bao YQ, Lu H. Oxymatrine Causes Hepatotoxicity by Promoting the Phosphorylation of JNK and Induction of Endoplasmic Reticulum

- Stress Mediated by ROS in LO2 Cells. *Mol Cells*. 2018 May 31;41(5):401-412.
28. Huang H, Li H, Shi K, Wang L, Zhang X, Zhu X. TREK-TRAAK two-pore domain potassium channels protect human retinal pigment epithelium cells from oxidative stress. *Int J Mol Med*. 2018 Nov;42(5):2584-2594.
  29. Zhu HZ, Hou J, Guo Y, Liu X, Jiang FL, Chen GP, Pang XF, Sun JG, Chen ZT. Identification and imaging of miR-155 in the early screening of lung cancer by targeted delivery of octreotide-conjugated chitosan-molecular beacon nanoparticles. *Drug Deliv*. 2018 Nov;25(1):1974-1983.
  30. Zhong L, Jin J, Zheng D, Guan W, Guo Y, Chen A, Peng Y, Gao Q, Zheng Y, Huang H. Influence of super-hydrophobic silicone rubber substrate on the growth and differentiation of human lens epithelial cells. *J MATER SCI-MATER M*. 2018 Nov 13;29(11):176.
  31. Wei YL, Hua J, Liu XY, Hua XM, Sun C, Bai JA, Tang QY. LncNEN885 inhibits epithelial-mesenchymal transition by partially regulation of Wnt/β-catenin signalling in gastroenteropancreatic neuroendocrine neoplasms. *Cancer Sci*. 2018 Oct;109(10):3139-3148.
  32. Fang SY, Hu CQ, Liu MN, Tao L, Wang Y, Gong MJ, He Y, He TC, Bi Y. Reversibly immortalized hepatic progenitor cell line containing double suicide genes. *Int J Mol Med*. 2018 Oct;42(4):1977-1986.
  33. Chu P, He L, Li Y, Huang R, Liao L, Li Y, Zhu Z, Wang Y. Molecular cloning and functional characterisation of NLRX1 in grass carp (*Ctenopharyngodon idella*). *FISH SHELLFISH IMMUN*. 2018 Oct;81:276-283.
  34. Liu X, Li P, Hirayama R, Niu Y, Liu X, Chen W, Jin X, Zhang P, Ye F, Zhao T, Liu B, Li Q. Genistein sensitizes glioblastoma cells to carbon ions via inhibiting DNA-PKcs phosphorylation and subsequently repressing NHEJ and delaying HR repair pathways. *Radiother Oncol*. 2018 Oct;129(1):84-94.
  35. Shen J, Zhou T, Li H, Li W, Wang S, Song Y, Ke K, Cao M. Cab45s inhibits neuronal apoptosis following intracerebral hemorrhage in adult rats. *Brain Res Bull*. 2018 Oct;143:36-44.
  36. Zhang RQ, Sun XF, Wu RY, Cheng SF, Zhang GL, Zhai QY, Liu XL, Zhao Y, Shen W, Li L. Zearalenone exposure elevated the expression of tumorigenesis genes in mouse ovarian granulosa cells. *TOXICOL APPL PHARM*. 2018 Oct 1;356:191-203.
  37. Zhao X, Qi T, Kong C, Hao M, Wang Y, Li J, Liu B, Gao Y, Jiang J. Photothermal exposure of polydopamine-coated branched Au-Ag nanoparticles induces cell cycle arrest, apoptosis, and autophagy in human bladder cancer cells. *INT J NANOMED*. 2018 Oct 12;13:6413-6428.
  38. Ma YS, Lv ZW, Yu F, Chang ZY, Cong XL, Zhong XM, Lu GX, Zhu J, Fu D. MicroRNA-302a/d inhibits the self-renewal capability and cell cycle entry of liver cancer stem cells by targeting the E2F7/AKT axis. *J EXP CLIN CANC RES*. 2018 Oct 16;37(1):252.
  39. Zhang Z, Wei Y, Liu B, Wu Y, Wang H, Xie X, Feng Z, Shao G, Xiong Q. Hsp90/Sec22b promotes unconventional secretion of mature-IL-1β through an autophagosomal carrier in porcine alveolar macrophages during Mycoplasma hyopneumoniae infection. *Mol Immunol*. 2018 Sep;101:130-139.
  40. Teng F, Xu Z, Chen J, Zheng G, Zheng G, Lv H, Wang Y, Wang L, Cheng X. DUSP1 induces apatinib resistance by activating the MAPK pathway in gastric cancer. *Oncol Rep*. 2018 Sep;40(3):1203-1222.
  41. Sun L, Hu L, Zhang P, Li H, Sun J, Wang H, Xie X, Hu J. Silencing of PMEL attenuates melanization via activating lysosomes and degradation of tyrosinase by lysosomes. *BIOCHEM BIOPH RES CO*. 2018 Sep 18;503(4):2536-2542.
  42. Zhao Z, Zhang Y, Tian C, Yin T, Zhang C. Facile dynamic one-step modular assembly based on boronic acid-diol for construction of a micellar drug delivery system. *BIOMATER SCI-UK*. 2018 Sep 25;6(10):2605-2618.
  43. Jiang Y, Zhang T, Vallesi A, Yang X, Gao F. Time-course analysis of nuclear events during conjugation in the marine ciliate *Euplotes vannus* and comparison with other ciliates (Protozoa, Ciliophora). *Cell Cycle*. 2019 Feb;18(3):288-298.
  44. Tian J, Rui K, Hong Y, Wang X, Xiao F, Lin X, Ma J, Guo H, Xu H, Ma K, Xu D, Liu D, Zhao Y, Lu L, Wang S. Increased GITRL Impairs the Function of Myeloid-Derived Suppressor Cells and Exacerbates Primary Sjögren Syndrome. *J Immunol*. 2019 Mar 15;202(6):1693-1703.
  45. Shi R, Xiang W, Kang X, Zhang L, Wang J, Miao H, He F. Alteration of Adaptive Immunity in a Colorectal Peritoneal Carcinomatosis Model. *J Cancer*. 2010(2):367-377.
  46. Liu G, Wang Y, Zheng W, Cheng H, Zhou R. P11 Loss-of-Function is Associated with Decreased Cell Proliferation and Neurobehavioral Disorders in Mice. *Int J Biol Sci*. 2015(7):1383-1395.
  47. Li HG, Liao AH, Ding XF, Zhou H, Xiong CL. The expression and significance of CATSPER1 in human testis and ejaculated spermatozoa. *Asian J Androl*. 2006 May;8(3):301-6.
  48. Yao G, Ling L, Luan J, Ye D, Zhu P. Nonylphenol induces apoptosis of Jurkat cells by a caspase-8 dependent mechanism. *Int Immunopharmacol*. 2007 Apr;7(4):444-453.
  49. Wang Q, Wang Y, Liang C, Song J, Chen X. Identification of a hydrophobic domain of HA2 essential to morphogenesis of *Helicoverpa armigera* nucleopolyhedrovirus. *J Virol*. 2008 Apr;82(8):4072-81.
  50. Han M, He CX, Fang QL, Yang XC, Diao YY, Xu DH, He QJ, Hu YZ, Liang WQ, Yang B, Gao JQ. A novel camptothecin derivative incorporated in nano-carrier induced distinguished improvement in solubility, stability and anti-tumor activity both in vitro and in vivo. *PHARM RES-DORDR*. 2009 Apr;26(4):926-35.
  51. Chen Z, Li Z, Peng G, Chen X, Yin W, Kotlikoff MI, Yuan ZQ, Ji G. Extracellular ATP-induced nuclear Ca<sup>2+</sup> transient is mediated by inositol 1,4, 5-trisphosphate receptors in mouse pancreatic beta-cells. *BIOCHEM BIOPH RES CO*. 2009 May 1;382(2):381-4.
  52. Liu Y, Sheng Z, Liu H, Wen D, He Q, Wang S, Shao W, Jiang RJ, An S, Sun Y, Bendena WG, Wang J, Gilbert LI, Wilson TG, Song Q, Li S. Juvenile hormone counteracts the bHLH-PAS transcription factors MET and GCE to prevent caspase-dependent programmed cell death in *Drosophila*. *Development*. 2009 Jun;136(12):2015-25.
  53. Ma K, Hu M, Qi Y, Qiu L, Jin Y, Yu J, Li B. Structure-transfection activity relationships with glucocorticoid-polyethyl-enimine conjugate nuclear gene delivery systems. *Biomaterials*. 2009 Aug;30(22):3780-9.
  54. Zeng X, Nan F, Liang C, Song J, Wang Q, Vlak JM, Chen X. Functional analysis of the *Autographa californica* nucleopolyhedrovirus IAP1 and IAP2. *SCI CHINA LIFE SCI*. 2009 Aug;52(8):761-70.
  55. Ma K, Hu MX, Qi Y, Zou JH, Qiu LY, Jin Y, Ying XY, Sun HY. PAMAM-triamcinolone acetonide conjugate as a nucleus-targeting gene carrier for enhanced transfer activity. *Biomaterials*. 2009 Oct;30(30):6109-18.
  56. Badraoui R, Blouin S, Moreau MF, Gallois Y, Rebai T, Sahnoun Z, Baslé M, Chappard D. Effect of alpha tocopherol acetate in Walker 256/B cells-induced oxidative damage in a rat model of breast cancer skeletal metastases. *CHEM-BIOL INTERACT*. 2009 Dec 10;182(2-3):98-105.
  57. Gong Y, Wu J, Huang Y, Shen S, Han X. Nonylphenol induces apoptosis in rat testicular Sertoli cells via endoplasmic reticulum stress. *Toxicol Lett*. 2009;186(2):84-95.
  58. Jiang X, Zhang J, Xia M, Qiu W, Wang H, Zhao D, Wang Y. Role of activating transcription factor 3 (ATF3) in sublytic C5b-9-induced glomerular mesangial cell apoptosis. *Cell Mol Immunol*. 2010 Mar;7(2):143-51.
  59. Chen YJ, Huang XB, Li ZX, Yin LL, Chen WQ, Li L. Tenuigenin protects cultured hippocampal neurons against methylglyoxal-induced neurotoxicity. *Eur J Pharmacol*. 2010;645(1-3):1-8.
  60. Zhang L, Li HZ, Gong X, Luo FL, Wang B, Hu N, Wang CD, Zhang Z, Wan JY. Protective effects of Asiaticoside on acute liver injury induced by lipopolysaccharide/D-galactosamine in mice. *Phytomedicine*. 2010;17(10):811-9.
  61. Wu H, Lin Y, Shi Y, Qian W, Tian Z, Yu Y, Huo K. SIAH-1 interacts with mammalian polyhomeotic homologues HPH2 and affects its stability via the ubiquitin-proteasome pathway. *BIOCHEM BIOPH RES CO*. 2010 Jul 2;397(3):391-6.
  62. Guo XF, Zhu XF, Shang Y, Zhang SH, Zhen YS. A bispecific enediyne-energized fusion protein containing ligand-based and antibody-based oligopeptides against. *Clin Cancer Res*. 2010 Apr 1;16(7):2085-94.

63. Peng ZG, Fan B, Du NN, Wang YP, Gao LM, Li YH, Li YH, Liu F, You XF, Han YX, Zhao ZY, Cen S, Li JR, Song DQ, Jiang JD. Small molecular compounds that inhibit hepatitis C virus replication through destabilizing heatshock cognate 70 messenger RNA. *Hepatology*. 2010 Sep;52(3):845-53.
64. Yang M, Zhang M, Chen J, Mukherjee R, Zhang L, Lin S, Gu Y. Angiopoietin-1 inhibits mouse glomerular endothelial cell senescence via Tie2 receptor-modulatedERK1/2 signaling. *Am J Nephrol*. 2010;31(6):490-500.
65. Zhang YP, Wan P, Wang HQ, Zhao H, Xu YX, Yang R, Zhu CQ. Effect of neuronal excitotoxicity on Munc18-1 distribution in nuclei of rat hippocampal neuron andprimary cultured neuron. *Neurosci Bull*. 2011 Jun;27(3):163-72.
66. Peng ZG, Zhao ZY, Li YP, Wang YP, Hao LH, Fan B, Li YH, Wang YM, Shan YQ, Han YX, Zhu YP, Li JR, You XF, Li ZR, Jiang JD. Host apolipoprotein B messenger RNA-editing enzyme catalytic polypeptide-like 3G is an innatedefensive factor and drug target against hepatitis C virus. *Hepatology*. 2011 Apr;53(4):1080-9.
67. Hu XL, Cheng X, Cai L, Tan GH, Xu L, Feng XY, Lu TJ, Xiong H, Fei J, Xiong ZQ. Conditional deletion of NRSF in forebrain neurons accelerates epileptogenesis in the kindlingmodel. *Cereb Cortex*. 2011 Sep;21(9):2158-65.
68. He XN, Su F, Lou ZZ, Jia WZ, Song YL, Chang HY, Wu YH, Lan J, He XY, Zhang Y. Ipr1 gene mediates RAW 264.7 macrophage cell line resistance to Mycobacterium bovis. *Scand J Immunol*. 2011 Nov;74(5):438-44.
69. Wu H, Shi Y, Lin Y, Qian W, Yu Y, Huo K. Eukaryotic translation elongation factor 1 delta inhibits the ubiquitin ligase activity of SIAH-1. *Mol Cell Biochem*. 2011 Nov;357(1-2):209-15.
70. Yang H, Taylor HS, Lei C, Cheng C, Zhang W. Hormonal regulation of galectin 3 in trophoblasts and its effects on endometrium. *Reprod Sci*. 2011 Nov;18(11):1118-27.
71. Wang H, Xie X, Zhang F, Zhou Q, Tao Q, Zou Y, Chen C, Zhou C, Yu S. Evaluation of cholesterol depletion as a marker of nephrotoxicity in vitro for novel  $\beta$ -cyclodextrin derivatives. *Food Chem Toxicol*. 2011 Jun;49(6):1387-93.
72. Zhou J, Lin J, Zhou C, Deng X, Xia B. Cytotoxicity of red fluorescent protein DsRed is associated with the suppression of Bcl-xLtranslation. *FEBS Lett*. 2011 Mar 9;585(5):821-7.
73. Liu Q, Kou JP, Yu BY. Ginsenoside Rg1 protects against hydrogen peroxide-induced cell death in PC12 cells viainhibiting NF- $\kappa$ B activation. *Neurochem Int*. 2011 Jan;58(1):119-25.
74. Kong FL, Cheng W, Chen J, Liang Y. d-Ribose glycates  $\beta$ (2)-microglobulin to form aggregates with high cytotoxicity through a ROS-mediated pathway. *CHEM-BIOL INTERACT*. 2011 Oct 15;194(1):69-78.
75. Ji SZ, Xiao SC, Luo PF, Huang GF, Wang GY, Zhu SH, Wu MJ, Xia ZF. An epidermal stem cells niche microenvironment created by engineered human amnioticmembrane. *Biomaterials*. 2011 Nov;32(31):7801-11.
76. Zhang X, Wang J, Zhou Q, Xu Y, Pu S, Wu J, Xue Y, Tian Y, Lu J, Jiang W, Du D. Brain-derived neurotrophic factor-activated astrocytes produce mechanical allodynia in neuropathic pain. *Neuroscience*. 2011 Dec 29;199:452-60.
77. Li Z, Mi L, Wang PN, Chen JY. Study on the visible-light-induced photokilling effect of nitrogen-doped TiO<sub>2</sub> nanoparticles oncancer cells. *Nanoscale Res Lett*. 2011 Apr 21;6(1):356.
78. Liu SL, Zhang ZL, Sun EZ, Peng J, Xie M, Tian ZQ, Lin Y, Pang DW. Visualizing the endocytic and exocytic processes of wheat germ agglutinin by quantum dot-basedsingle-particle tracking. *Biomaterials*. 2011 Oct;32(30):7616-24.
79. Bai D, Gao Q, Li C, Ge L, Gao Y, Wang H. A conserved TGF $\beta$ 1/HuR feedback circuit regulates the fibrogenic response in fibroblasts. *Cell Signal*. 2012 Jul;24(7):1426-32.
80. Li B, Xu H, Li Z, Yao M, Xie M, Shen H, Shen S, Wang X, Jin Y. Bypassing multidrug resistance in human breast cancer cells with lipid/polymer particleassemblies. *INT J NANOMED*. 2012;7:187-97.
81. Wang S, Tan Y, Lei W, Wang Y, Zhou X, Jia X, Zhang K, Chu L, Liu X, Qian W. Complete eradication of xenograft hepatoma by oncolytic adenovirus ZD55 harboring TRAIL-IETD-Smac gene with broad antitumor effect. *Hum Gene Ther*. 2012 Sep;23(9):992-1002.
82. Zhai W, He C, Wu L, Zhou Y, Chen H, Chang J, Zhang H. Degradation of hollow mesoporous silica nanoparticles in human umbilical vein endothelial cells. *J BIOMED MATER RES B*. 2012 Jul;100(5):1397-403.
83. Zhang J, Zhou F, Wu X, Zhang X, Chen Y, Zha BS, Niu F, Lu M, Hao G, Sun Y, Sun J, Peng Y, Wang G. Cellular pharmacokinetic mechanisms of adriamycin resistance and its modulation by20(S)-ginsenoside Rh2 in MCF-7/Adr cells. *BRIT J PHARMACOL*. 2012 Jan;165(1):120-34.
84. Zhang KJ, Qian J, Wang SB, Yang Y. Targeting Gene-Viro-Therapy with AFP driving Apoptin gene shows potent antitumor effect inhepatocarcinoma. *J Biomed Sci*. 2012 Feb 9;19:20.
85. He G, Lei W, Wang S, Xiao R, Guo K, Xia Y, Zhou X, Zhang K, Liu X, Wang Y. Overexpression of tumor suppressor TSLC1 by a survivin-regulated oncolytic adenovirussignificantly inhibits hepatocellular carcinoma growth. *J CANCER RES CLIN*. 2012 Apr;138(4):657-70.
86. Xiong XY, Guo L, Gong YC, Li ZL, Li YP, Liu ZY, Zhou M. In vitro &in vivo targeting behaviors of biotinylated Pluronic F127/poly(lactic acid) nanoparticlesthrough biotin-avidin interaction. *Eur J Pharm Sci*. 2012 Aug 15;46(5):537-44.
87. Yin QQ, Dong CF, Dong SQ, Dong XL, Hong Y, Hou XY, Luo DZ, Pei JJ, Liu XP. AGEs Induce Cell Death via Oxidative and Endoplasmic Reticulum Stresses in Both Human SH-SY5Y Neuroblastoma Cells and Rat Cortical Neurons. *Cell Mol Neurobiol*. 2012 Nov;32(8):1299-309.
88. Li C, Nie H, Wang M, Su L, Li J, Yu B, Wei M, Ju J, Yu Y, Yan M, Gu Q, Zhu Z, Liu B. MicroRNA-409-3p regulates cell proliferation and apoptosis by targeting PHP10 in gastric cancer. *Cancer Lett*. 2012 Jul 28;320(2):189-97.
89. Guo HF, Li ZS, Dong SW, Chen WJ, Deng L, Wang YF, Ying DJ. Piezoelectric PU/PVDF electrospun scaffolds for wound healing applications. *COLLOID SURFACE B*. 2012 Aug 1;96:29-36.
90. Yin T, Wang P, Zheng R, Zheng B, Cheng D, Zhang X, Shuai X. Nanobubbles for enhanced ultrasound imaging of tumors. *INT J NANOMED*. 2012;7:895-904.
91. Zheng J, Chen Z, Yin W, Miao L, Zhou Z, Ji G. Ryanodine receptors are involved in nuclear calcium oscillation in primary pancreatic  $\beta$ -cells. *BIOCHEM BIOPH RES CO*. 2012 Jun 29;423(2):207-11.
92. Tu Z, Li H, Ma Y, Tang B, Tian J, Akers W, Achilefu S, Gu Y. The enhanced antiproliferative response to combined treatment of trichostatin A with raloxifene inMCF-7 breast cancer cells and its relevance to estrogen receptor  $\beta$  expression. *Mol Cell Biochem*. 2012 Jul;366(1-2):111-22.
93. Zheng X, Tian J, Weng L, Wu L, Jin Q, Zhao J, Wang L. Cytotoxicity of cadmium-containing quantum dots based on a study using a microfluidic chip. *Nanotechnology*. 2012 Feb 10;23(5):055102.
94. Tu Z, Ma Y, Tian J, Li H, Akers W, Achilefu S, Gu Y. Estrogen receptor  $\beta$  potentiates the antiproliferative effect of raloxifene and affects the cellmigration and invasion in HCT-116 colon cancer cells. *J CANCER RES CLIN*. 2012 Jul;138(7):1091-103.
95. Li S, Zhang Z, Xue J, Liu A, Zhang H. Cold-inducible RNA binding protein inhibits H2O2-induced apoptosis in rat cortical neurons. *Brain Res*. 2012 Mar 2;1441:47-52.
96. Cheng J, Tang W, Su Z, Guo J, Tong L, Wei Q. Calcineurin subunit B promotes TNF-alpha-induced apoptosis by binding to mitochondria andcausing mitochondrial Ca<sup>2+</sup> overload. *Cancer Lett*. 2012 Aug 28;321(2):169-78.
97. Peng H, Wu Y, Zhang Y. Efficient delivery of DNA and morpholinos into mouse preimplantation embryos by electroporation. *PLoS One*. 2012;7(8):e43748.
98. Jing C, Li X, Zhang J, Wang J. Responses of the Antioxidant System in QGY-7701 Cells to the Cytotoxicity and Apoptosis Induced by 1-Octyl-3-methylimidazolium Chloride. *J BIOCHEM MOL TOXIC*. 2013 Jun;27(6):330-6.
99. Lei W, Liu HB, Wang SB, Zhou XM, Zheng SD, Guo KN, Ma BY, Xia YL, Tan WS, Liu XY, Wang YG. Tumor suppressor in lung cancer-1 (TSLC1) mediated by dual-regulated oncolytic adenovirus exerts specificantitumor actions in a mouse model. *Acta Pharmacol Sin*. 2013 Apr;34(4):531-40.
100. Liu J, Zuo X, Li C, Yu T, Gu X, Zhou C, Li Z, Goetz M, Kiesslich R, Li Y. In vivo molecular imaging of epidermal growth factor receptor in patients with colorectal neoplasia using confocallaser endomicroscopy. *Cancer Lett*. 2013 Apr 28;330(2):200-7.
101. Zhang Y, Wang X, Fang W, Cai X, Chu F, Liao X, Lu J. Synthesis and In Vitro

- Antitumor Activity of Two Mixed-Ligand Oxovanadium(IV) Complexes of Schiff Base and Phenanthroline. *Bioinorg Chem Appl.* 2013;2013:437134.
102. Nie C, Zhang G, Yang D, Liu T, Liu D, Xu J, Zhang J. Targeted delivery of adipose-derived stem cells via acellular dermal matrix enhances wound repair in diabetic rats. *J TISSUE ENG REGEN M.* 2015 Mar;9(3):224-35.
  103. Shi J, Jiang Q, Ding X, Xu W, Wang DW, Chen M. The ER stress-mediated mitochondrial apoptotic pathway and MAPKs modulate tachypacing-induced apoptosis in HL-1 atrial myocytes. *PLoS One.* 2015 Feb 17;10(2):e0117567.
  104. Hu XL, Guo LP, Song Q, Zhang Q, Chen Y, Wang J, Meng WH, Zhao QC. Kukoamine B, an amide alkaloid, protects against NMDA-induced neurotoxicity and potential mechanisms in vitro. *Neurochem Int.* 2015 Aug;87:66-76.
  105. Gao X, Zhang X, Wang Y, Wang Y, Peng S, Fan C. An in vitro study on the cytotoxicity of bismuth oxychloride nanosheets in human HaCaT keratinocytes. *Food Chem Toxicol.* 2015 Jun;80:52-61.
  106. Hou L, Li Y, Song H, Zhang Z, Sun Y, Zhang X, Wu K. Protective Macroautophagy Is Involved in Vitamin E Succinate Effects on Human Gastric Carcinoma Cell Line SGC-7901 by Inhibiting mTOR Axis Phosphorylation. *PLoS One.* 2015 Jul 13;10(7):e0132829.
  107. Wang H, Bao W, Jiang F, Che Q, Chen Z, Wang F, Tong H, Dai C, He X, Liao Y, Liu B, Sun J, Wan X. Mutant p53 (p53-R248Q) functions as an oncogene in promoting endometrial cancer by up-regulating REGY. *Cancer Lett.* 2015 May 1;360(2):269-79.
  108. Chen H, Liao K, Cui-Zhao L, Qiang-Wen F, Feng-Zeng X, Ping-Wu F, Liang-Guo S, Juan-Chen Y. Cigarette smoke extract induces apoptosis of rat alveolar Type II cells via the PLTP/TGF- $\beta$  1/Smad2 pathway. *Int Immunopharmacol.* 2015 Sep;28(1):707-14.
  109. Chen JJ, Hong G, Gao LJ, Liu TJ, Cao WJ. In vitro and in vivo antitumor activity of a novel porphyrin-based photosensitizer for photodynamic therapy. *J CANCER RES CLIN.* 2015 Sep;141(9):1553-61.
  110. Zhang B, Zhang Y, Liao Z, Jiang T, Zhao J, Tuo Y, She X, Shen S, Chen J, Zhang Q, Jiang X, Hu Y, Pang Z. UPA-sensitive ACPP-conjugated nanoparticles for multi-targeting therapy of brain glioma. *Biomaterials.* 2015 Jan;36:98-109.
  111. Cai XY, Xia Y, Yang SH, Liu XZ, Shao ZW, Liu YL, Yang W, Xiong LM. Ropivacaine- and bupivacaine-induced death of rabbit annulus fibrosus cells in vitro: involvement of the mitochondrial apoptotic pathway. *OSTEOARTHR CARTILAGE.* 2015 Oct;23(10):1763-75.
  112. Yan F, Wang X, Shao L, Ge M, Hu X. Analysis of UHRF1 expression in human ovarian cancer tissues and its regulation in cancer cell growth. *TUMOR BIOL.* 2015 Nov;36(11):8887-93.
  113. Jiao Y, Ma S, Li J, Shan L, Wang Y, Tian M, Yang Y, Sun J, Ban J, Chen J. N-Acetyl Cysteine (NAC)-Directed Detoxification of Methacryloylethyl Cetyl Ammonium Chloride (DMAE-CB). *PLoS One.* 2015 Aug 14;10(8):e0135815.
  114. Zhang LJ, Yan YJ, Liao PY, Margetic D, Wang L, Chen ZL. Synthesis and antitumor activity evaluation of a novel porphyrin derivative for photodynamic therapy in vitro and in vivo. *TUMOR BIOL.* 2016 May;37(5):6923-33.
  115. He X, Yu H, Bao X, Cao H, Yin Q, Zhang Z, Li Y. pH-Responsive Wormlike Micelles with Sequential Metastasis Targeting Inhibit Lung Metastasis of Breast Cancer. *Adv Healthc Mater.* 2016 Feb 18;5(4):439-48.
  116. Zhen N, Yang Q, Wu Q, Zhu X, Wang Y, Sun F, Mei W, Yu Y. A novelly synthesized phenanthroline derivative is a promising DNA-damaging anticancer agent inhibiting G1/S checkpoint transition and inducing cell apoptosis in cancer cells. *CANCER CHEMOTH PHARM.* 2016 Jan;77(1):169-80.
  117. Zhang Q, Fan K, Wang P, Yu J, Liu R, Qi H, Sun H, Cao Y. Carvacrol induces the apoptosis of pulmonary artery smooth muscle cells under hypoxia. *Eur J Pharmacol.* 2016 Jan;770(5):134-6.
  118. Yu X, Wang J, Liu J, Shen S, Cao Z, Pan J, Zhou S, Pang Z, Geng D, Zhang J. A multimodal Pepstatin A peptide-based nanoagent for the molecular imaging of P-glycoprotein in the brains of epilepsy rats. *Biomaterials.* 2016 Jan;76:173-86.
  119. Shi M, Ren X, Wang X, Wang H, Liu G, Yuan X, Zheng S, Yu L, Pan S, Song G, Guo Q, Li L, Zhang X, Zhang Z, Ding H, Jiang G. A novel combination of oridonin and valproic acid in enhancement of apoptosis induction of HL-60 leukemia cells. *Int J Oncol.* 2016 Feb;48(2):734-46.
  120. Dan J, Sun X, Li W, Zhang Y, Li X, Xu H, Li Z, Tian Z, Guo S, Yao J, Gao W, Tian Y. 5-Aminolevulinic Acid-Mediated Sonodynamic Therapy Promotes Phenotypic Switching from Dedifferentiated to Differentiated Phenotype via Reactive Oxygen Species and p38 Mitogen-Activated Protein Kinase in Vascular Smooth Muscle Cells. *Ultrasound Med Biol.* 2016 Feb;5(4):439-48.
  121. Wang Y, Tu L, Li Y, Chen D, Wang S. Notoginsenoside R1 Protects against Neonatal Cerebral Hypoxic-Ischemic Injury through Estrogen Receptor-Dependent Activation of Endoplasmic Reticulum Stress Pathways. *J Pharmacol Exp Ther.* 2016 Jun;357(3):591-605.
  122. Gu LL, Zhang XY, Xing WM, Xu JD, Lu H. Andrographolide-induced apoptosis in human renal tubular epithelial cells: Roles of endoplasmic reticulum stress and inflammatory response. *ENVIRON TOXICOL CHEM.* 2016 Jul;45:257-64.
  123. Yang X, Lv Y, Huang K, Luo Y, Xu W. Zinc inhibits aflatoxin B1-induced cytotoxicity and genotoxicity in human hepatocytes (HepG2 cells). *Food Chem Toxicol.* 2016 Jun;92:17-25.
  124. Bai JA, Jie H, Wei S, Wang S, Guo H, Tang Q. GART mediates the renewal of intestinal epithelial barrier via p38/p53/PUMA cascade in colitis. *Apoptosis.* 2016 Dec;21(12):1386-1397.
  125. Zhang LJ, Zhang XH, Liao PY, Sun JJ, Wang L, Yan YJ, Chen ZL. Antitumor activity evaluation of meso-tetra (pyrrolidine substituted) pentylporphyrin-mediated photodynamic therapy in vitro and in vivo. *J PHOTOCHEM PHOTOBIO B.* 2016 Oct;163:224-31.
  126. Zhang XH, Zhang LJ, Sun JJ, Yan YJ, Zhang LX, Chen N, Chen ZL. Photodynamic efficiency of a chlorophyll-a derivative in vitro and in vivo. *Biomed Pharmacother.* 2016 Jul;81:265-72.
  127. Zhang Q, Fan K, Wang P, Yu J, Liu R, Qi H, Sun H, Cao Y. Carvacrol induces the apoptosis of pulmonary artery smooth muscle cells under hypoxia. *Eur J Pharmacol.* 2016 Jan 5;770:134-46.
  128. Liu Y, Li F, Gao F, Xing L, Qin P, Liang X, Zhang J, Qiao X, Lin L, Zhao Q, Du L. Periostin promotes the chemotherapy resistance to gemcitabine in pancreatic cancer. *TUMOR BIOL.* 2016 Nov;37(11):15283-15291.
  129. Wang Y, Liu Q, Xu Y, Zhang Y, Lv Y, Tan Y, Jiang N, Cao G, Ma X, Wang J, Cao Z, Yu B, Kou J. Ginsenoside Rg1 Protects against Oxidative Stress-induced Neuronal Apoptosis through Myosin IIA-actin Related Cytoskeletal Reorganization. *Int J Biol Sci.* 2016 Oct 25;12(11):1341-1356.
  130. Zhen N, Yang Q, Wu Q, Zhu X, Wang Y, Sun F, Mei W, Yu Y. A novelly synthesized phenanthroline derivative is a promising DNA-damaging anticancer agent inhibiting G1/S checkpoint transition and inducing cell apoptosis in cancer cells. *CANCER CHEMOTH PHARM.* 2016 Jan;77(1):169-80.
  131. Sun M, Zhou C, Zeng H, Yin F, Wang Z, Yao J, Huay Y, Cai Z. Benzochloroporphyrin derivative photosensitizer-mediated photodynamic therapy for Ewing sarcoma. *J PHOTOCHEM PHOTOBIO B.* 2016 Jul;160:178-84.
  132. Fan Y, Liu J, Liu D, Zhou Z, Bao Y, Wang J, Zhao Q, Xu Y. NSCA-1-a novel N-substituted coumalamide derivative-increases Adriamycin sensitivity in HepG2/adriamycin cells through modulating Akt/GSK-3 $\beta$  signaling and p53-dependant apoptotic pathway. *ENVIRON TOXICOL CHEM.* 2017 Jan;49:1-7.
  133. Hu Y, Xiong LL, Zhang P, Wang TH. Microarray expression profiles of genes in lung tissues of rats subjected to focal cerebral ischemia-induced lung injury following bone marrow-derived mesenchymal stem cell transplantation. *Int J Mol Med.* 2017 Jan;39(1):57-70.
  134. You F, Li Q, Jin G, Zheng Y, Chen J, Yang H. Genistein protects against A $\beta$ 25-35 induced apoptosis of PC12 cells through JNK signaling and modulation of Bcl-2 family messengers. *BMC Neurosci.* 2017 Jan 12;18(1):12.
  135. Yan X, Xun M, Dou X, Wu L, Han Y, Zheng J. Regulation of Na $^{+}$ -K $^{+}$ -ATPase effected high glucose-induced myocardial cell injury through c-Src-dependent NADPH oxidase/ROS pathway. *Exp Cell Res.* 2017 Aug 15;357(2):243-251.
  136. Wang Z, Liao K, Zuo W, Liu X, Qiu Z, Gong Z, Liu C, Zeng Q, Qian Y, Jiang L, Bu Y, Hong S, Hu G. Depletion of NFBD1/MDC1 Induces Apoptosis in Nasopharyngeal Carcinoma Cells Through the p53-ROS-Mitochondrial Pathway. *Oncol Res.* 2017

Jan 2;25(1):123-136.

137. Hu Y, Xiong LL, Zhang P, Wang TH. Microarray expression profiles of genes in lung tissues of rats subjected to focal cerebral ischemia-induced lung injury following bone marrow-derived mesenchymal stem cell transplantation. *Int J Mol Med*. 2017 Jan;39(1):57-70.
138. Geng YD, Zhang C, Lei JL, Yu P, Xia YZ, Zhang H, Yang L, Kong LY. Walsuronoid B induces mitochondrial and lysosomal dysfunction leading to apoptotic rather than autophagic cell death via ROS/p53 signaling pathways in liver cancer. *Biochem Pharmacol*. 2017 Oct 15;142:71-86.
139. Chen GH, Xu CS, Zhang J, Li Q, Cui HH, Li XD, Chang LP, Tang RJ, Xu JY, Tian XQ, Huang PS, Xu J, Jin C, Yang YJ. Inhibition of miR-128-3p by Tongxinluo Protects Human Cardiomyocytes from Ischemia/reperfusion Injury via Upregulation of p70s6k1/p-p70s6k1. *Front Pharmacol*. 2017 Oct 30;8:775.
140. Hao J, Yang Z, Wang L, Zhang Y, Shu Y, Jiang L, Hu Y, Lv W, Dong P, Liu Y. Downregulation of BRD4 inhibits gallbladder cancer proliferation and metastasis and induces apoptosis via PI3K/AKT pathway. *Int J Oncol*. 2017 Sep;51(3):823-831.
141. Liu W, Wang X, Liu Z, Wang Y, Yin B, Yu P, Duan X, Liao Z, Chen Y, Liu C, Li X, Dai Y, Tao Z. SGK1 inhibition induces autophagy-dependent apoptosis via the mTOR-Foxo3a pathway. *BRIT J CANCER*. 2017 Oct 10;117(8):1139-1153.
142. Liu X, Qiu Z, Wang Z, Zuo W, Gong Z, Liu C, Zeng Q, Qian Y, Jiang L, Li Y, Bu Y, Hu G. NFB1/MDC1 participates in the regulation of proliferation and apoptosis in human laryngeal squamous cell carcinoma. *Clin Transl Oncol*. 2017 Sep 18.
143. Liu JC, Lai FN, Li L, Sun XF, Cheng SF, Ge W, Wang YF, Li L, Zhang XF, De Felici M, Dyce PW, Shen W, Di (2-ethylhexyl) phthalate exposure impairs meiotic progression and DNA damage repair in fetal mouse oocytes in vitro. *Cell Death Dis*. 2017 Aug 3;8(8):e2966.
144. Ying C, Xiao BD, Qin Y, Wang BR, Liu XY, Wang RW, Fang L, Yan H, Zhou XM, Wang YG. GOLPH2-regulated oncolytic adenovirus, GD55, exerts strong killing effect on human prostate cancer stem-like cells in vitro and in vivo. *Acta Pharmacol Sin*. 2017 Sep 7.
145. Zhai Y1, Li Y2, Wang Y3, Cui J2, Feng K4, Kong X2, Chen L5. Psoralidin, a prenylated coumestan, as a novel anti-osteoporosis candidate to enhance bone formation of osteoblasts and decrease bone resorption of osteoclasts. *Eur J Pharmacol*. 2017 Apr 15;801:62-71.
146. Wang Y1, Qiu Y1, Yin S1, Zhang L1, Shi K1, Gao H1, Zhang Z1, He Q1. A functional nanocarrier that copenetrates extracellular matrix and multiple layers of tumor cells for sequential and deep tumor autophagy inhibitor and chemotherapeutic delivery. *Autophagy*. 2017 Feb;13(2):359-370.
147. Yang LL1, Zhao Y1, Luo SM1, Ma JY1, Ge ZJ1, Shen W1, Yin S2. Toxic Effects and Possible Mechanisms of HydrogenSulfide and/or Ammonia on Porcine Oocyte Maturation in vitro. *Toxicol Lett*. 2017 Dec 29. pii: S0378-4274(17)31529-1.
148. Guo Y, Song Z, Zhou M, Yang Y, Zhao Y, Liu B, Zhang X. Infiltrating macrophages in diabetic nephropathy promote podocytes apoptosis via TNF- $\alpha$ -ROS-p38MAPK pathway. *ONCOTARGET*. 2017 Jun 7;8(32):53276-53287.
149. Sun L, Li Y, Jia X, Wang Q, Li Y, Hu M, Tian L, Yang J, Xing W, Zhang W, Wang J, Xu H, Wang L, Zhang D, Ren H. Neuroprotection by IFN- $\gamma$  via astrocyte-secreted IL-6 in acute neuroinflammation. *ONCOTARGET*. 2017 Jun 20;8(25):40065-40078.
150. Zhao C, Yao X, Chen X, Wu W, Xi F, Yang G, Yu T. Knockdown of ubiquitin D inhibits adipogenesis during the differentiation of porcine intramuscular and subcutaneous preadipocytes. *CELL PROLIFERAT*. 2017 Nov 23.
151. Wen Y, He W, Jiang M, Zeng M, Cai L. Deriving cells expressing markers of female germ cells from premature ovarian failure patient-specific induced pluripotent stem cells. *Regen Med*. 2017 Mar;12(2):143-152.
152. Wu X, Gao H, Sun W, Yu J, Hu H, Xu Q, Chen X. Nepetoidin B, a Natural Product, Inhibits LPS-stimulated Nitric Oxide Production via Modulation of iNOS Mediated by NF- $\kappa$ B/MKP-5 Pathways. *Phytother Res*. 2017 Jul;31(7):1072-1077.
153. Xiong LL, Liu F, Lu BT, Zhao WL, Dong XJ, Liu J, Zhang RP, Zhang P, Wang TH. Bone Marrow Mesenchymal Stem-Cell Transplantation Promotes Functional Improvement Associated with CNTF-STAT3 Activation after Hemi-Sectioned Spinal Cord Injury in Tree Shrews. *Front Cell Neurosci*. 2017 Jun 28;11:172.
154. Li Y, Sun Y, Cao T, Su Q, Li Z, Huang M, Ouyang R, Chang H, Zhang S, Miao Y. A cation-exchange controlled core-shell MnS@Bi2S3 theranostic platform for multimodal imaging guided radiation therapy with hyperthermia boost. *Nanoscale*. 2017 Oct 5;9(38):14364-14375.
155. Li X, Yan X, Wang Y, Wang J, Zhou F, Wang H, Xie W, Kong H. NLRP3 inflammasome inhibition attenuates silica-induced epithelial to mesenchymal transition (EMT) in human bronchial epithelial cells. *Exp Cell Res*. 2017 Dec 16. pii: S0014-4827(17)30668-7.
156. Chang S, Ruan WC, Xu YZ, Wang YJ, Pang J, Zhang LY, Liao H, Pang T. The natural product 4,10-aromadendranediol induces neuritogenesis in neuronal cells in vitro through activation of the ERK pathway. *Acta Pharmacol Sin*. 2017 Jan;38(1):29-40.
157. Sun Y, Wang C, Meng Q, Liu Z, Huo X, Sun P, Sun H, Ma X, Peng J, Liu K. Targeting P-glycoprotein and SORCIN: Dihydromyricetin strengthens anti-proliferative efficiency of adriamycin via MAPK/ERK and Ca<sup>2+</sup>-mediated apoptosis pathways in MCF-7/ADR and K562/ADR. *J Cell Physiol*. 2018 Apr;233(4):3066-3079.
158. Li X, Yan X, Wang Y, Wang J, Zhou F, Wang H, Xie W, Kong H. NLRP3 inflammasome inhibition attenuates silica-induced epithelial to mesenchymal transition (EMT) in human bronchial epithelial cells. *Exp Cell Res*. 2018 Jan 15;362(2):489-497.
159. Ouyang G, Xiong L, Liu Z, Lam B, Bui B, Ma L, Chen X, Zhou P, Wang K, Zhang Z, Huang H, Miao X, Chen W, Wen Y. Inhibition of autophagy potentiates the apoptosis-inducing effects of photodynamic therapy on human colon cancer cells. *PHOTODIAGN PHOTODYN*. 2018 Mar;21:396-403.
160. Long Fan, Leng Li, Xuhua Yu, Ziyao Liang, Tiantian Cai, Yuanbin Chen, Yinyin Xu, Tao Hu, Lei Wu, Lin Lin. Jianpiyifei II Granules Suppress Apoptosis of Bronchial Epithelial Cells in Chronic Obstructive Pulmonary Disease via Inhibition of the Reactive Oxygen Species-Endoplasmic Reticulum Stress-Ca<sup>2+</sup> Signa. *Front Pharmacol*. doi: 10.3389/fphar.2020.00581.
161. Jialiang Lin, Jinru Zhuge, Xuanqi Zheng, Yuhao Wu, Zengjie Zhang, Tianzhen Xu, Zaher Meftah, Hongming Xu, Yaosen Wu, Naifeng Tian, Weiyang Gao, Yifei Zhou, Xiaolei Zhang, Xiangyang Wang. Urolithin A-induced mitophagy suppresses apoptosis and attenuates intervertebral disc degeneration via the AMPK signaling pathway. *FREE RADICAL BIO MED*. doi: 10.1016/j.freeradbiomed.2020.02.024.
162. Chen Zhao, Ye Wang, Zhonglan Su, Wenyuan Pu, Mengyuan Niu, Shiyu Song, Lulu Wei, Yibing Ding, Lizhi Xu, Man Tian, Hongwei Wang. Respiratory exposure to PM2.5 soluble extract disrupts mucosal barrier function and promotes the development of experimental asthma. *Sci Total Environ*. doi: 10.1016/j.scitotenv.2020.139145.
163. Fidelis Chibhabha, Yaqi Yang, Kuang Ying, Fujie Jia, Qin Zhang, Shahid Ullah, Zibin Liang, Muke Xie, Feng Li. Non-invasive optical imaging of retinal A $\beta$  plaques using curcumin loaded polymeric micelles in APP sw/PS1  $\Delta$ E9 transgenic mice for the diagnosis of Alzheimer's disease. *J Mater Chem B*. doi: 10.1039/d0tb01101k.
164. Shihai Liu, Jing Qiu, Guifang He, Chao Geng, Weitai He, Changchang Liu, Duo Cai, Huazheng Pan, Qingwu Tian. Dermatopontin inhibits WNT signaling pathway via CXXC finger protein 4 in hepatocellular carcinoma. *J Cancer*. doi: 10.7150/jca.47157.
165. Liu De, Tang Yuan, Zheng Yong. ST1926 inhibits glioma progression through regulating mitochondrial complex II. *Biomed Pharmacother*. doi: 10.1016/j.bioph.2020.110291.
166. Hai-Zhen Zhu, Chun-Ju Fang, Yi Guo, Qi Zhang, Li-Min Huang, Dong Qiu, Guang-Peng Chen, Xiu-Feng Pang, Jian-Jun Hu, Jian-Guo Sun, Zheng-Tang Chen. Detection of miR-155-5p and imaging lung cancer for early diagnosis: in vitro and in vivo study. *J CANCER RES CLIN*. doi: 10.1007/s00432-020-03246-2.
167. Nan Wang, Yanping Feng, Jinye Xie, Hui Han, Qian Dong, Weijia Wang. Long Non-Coding RNA ZNF667-AS1 Knockdown Curbs Liver Metastasis in Acute Myeloid Leukemia by Regulating the microRNA-206/AKAP13 Axis. *Cancer Manag Res*. doi: 10.2147/CMAR.S269258.
168. Ya Li, Qiuju Han, Huajun Zhao, Quanjuan Guo, Jian Zhang. Napabucasin Reduces

- Cancer Stem Cell Characteristics in Hepatocellular Carcinoma. *Front Pharmacol.* doi: 10.3389/fphar.2020.597520.
169. Lin Yang, Delin Kong, Mei He, Jiawei Gong, Yuzhe Nie, Sheng Tai, Chun-Bo Teng. MiR-7 mediates mitochondrial impairment to trigger apoptosis and necroptosis in Rhabdomyosarcoma. *BBA-MOL CELL RES.* doi: 10.1016/j.bbamcr.2020.118826.
170. Kailin Jiao, Jing Zhen, Maoxuan Wu, Mengying Teng, Keke Yang, Qian Zhou, Chunyan Hu, Ming Zhou, Yuan Li, Zhong Li. 27-Hydroxycholesterol-induced EndMT acts via STAT3 signaling to promote breast cancer cell migration by altering the tumor microenvironment. *Cancer Biol Med.* doi: 10.20892/j.issn.2095-3941.2019.0262.
171. Yu Wang, Hongjing Zhao, Menghao Guo, Dongxue Fei, Lina Zhang, Mingwei Xing. Targeting the miR-122/PKM2 autophagy axis relieves arsenic stress. *J Hazard Mater.* doi: 10.1016/j.jhazmat.2019.121217.
172. Xiaoteng Fan, Tingting Hou, Shuai Zhang, Yongjing Guan, Jia Jia, Zaizhao Wang. The cellular responses of autophagy, apoptosis, and 5-methylcytosine level in zebrafish cells upon nutrient deprivation stress. *Chemosphere.* doi: 10.1016/j.chemosphere.2019.124989.
173. Yuan Zhang, Wei-Jian Huang, Qiu-Rui Yang, Hong-Dan Zhang, Xue-Jing Zhu, Min Zeng, Xu Zhou, Zhen-Yu Wang, Wei-Jian Li, Hong-Shu Jing, Xue-Bin Zhang, Yao-Ping Shi, Hao Hu, He-Xin Yan, Zong-Hai Li, Bo Zhai. Cryopreserved biopsy tissues of rectal cancer liver metastasis for assessment of anticancer drug response in vitro and in vivo. *Oncol Rep.* doi: 10.3892/or.2019.7450.
174. Song-Yun Chu, Fen Peng, Jie Wang, Lin Liu, Lei Meng, Jing Zhao, Xiao-Ning Han, Wen-Hui Ding. Catestatin in defense of oxidative-stress-induced apoptosis: A novel mechanism by activating the beta2 adrenergic receptor and PKB/Akt pathway in ischemic-reperfused myocardium. *Peptides.* doi: 10.1016/j.peptides.2019.170200.
175. Yong Qiao, Zhongjuan Xu, Yanzhen Yu, Shulan Hou, Junsa Geng, Tongqian Xiao, Yu Liang, Qun Dong, Yan Mei, Bin Wang, Hong Qiao, Jianwu Dai, Guangli Suo. Single cell derived spheres of umbilical cord mesenchymal stem cells enhance cell stemness properties, survival ability and therapeutic potential on liver failure. *Biomaterials.* doi: 10.1016/j.biomaterials.2019.119573.
176. Jun Li, Xuemei Yang, Fang Liu, Yaman Song, Yuanke Liu. Activated PI3K/AKT Signaling Pathway Associates with Oxidative Stress and Impaired Developmental Potential of Vitrified-Thawed Oocytes. *Reprod Sci.* doi: 10.1007/s43032-019-00036-1.
177. Zhijun Li, Yifei Yu, Juanjuan Kang, Yangyang Zheng, Jinying Xu, Kan Xu, Kun Hou, Yi Hou, Guangfan Chi. MicroRNA-124 Overexpression in Schwann Cells Promotes Schwann Cell-Astrocyte Integration and Inhibits Glial Scar Formation Ability. *Front Cell Neurosci.* doi: 10.3389/fncel.2020.00144.
178. Bo Zhang, Xinhai Mo, Fei Yu, Yuqin Ma, Fei Yan. Ultrasound monitoring of magnet-guided delivery of mesenchymal stem cells labeled with magnetic lipid-polymer hybrid nanobubbles. *BIOMATER SCI-UK.* doi: 10.1039/d0bm00473a.
179. Ruofeng Yin, Jiajia Jiang, Huimin Deng, Zhaobin Wang, Rui Gu, Fei Wang. miR-140-3p aggregates osteoporosis by targeting PTEN and activating PTEN/PI3K/AKT signaling pathway. *Hum Cell.* doi: 10.1007/s13577-020-00352-8.
180. Zhihui Liu, Chao Wu, Xinliang Zou, Weiming Shen, Jiacai Yang, Xiaorong Zhang, Xiaohong Hu, Haidong Wang, Yi Liao, Tao Jing. Exosomes derived from mesenchymal stem cells inhibit neointimal hyperplasia by activating the Erk1/2 signalling pathway in rats. *Stem Cell Res Ther.* doi: 10.1186/s13287-020-01676-w.
181. Liqiang Qian, Haoyuan Su, Gang Wang, Bin Li, Genhai Shen, Quangen Gao. Antitumor Activity of Bufalin by Inhibiting c-MET Mediated MEK/ERK and PI3K/AKT Signaling Pathways in Gallbladder Cancer. *J Cancer.* doi: 10.7150/jca.38393.
182. Denghui Zhu, Rong Huang, Pengfei Chu, Liangming Chen, Yangyu Li, Libo He, Yongming Li, Lanjie Liao, Zuoyan Zhu, Yaping Wang. Characterization and expression of galectin-3 in grass carp (*Ctenopharyngodon idella*). *Dev Comp Immunol.* doi: 10.1016/j.dci.2019.103567.
183. Chengcheng Gao, Xin Sun, Zhipan Wu, Huahua Yuan, Haote Han, Hongliang Huang, Yuhua Shu, Mengting Xu, Ruilan Gao, Shouxin Li, Jianbin Zhang, Jingkui Tian. A Novel Benzofuran Derivative Moracin N Induces Autophagy and Apoptosis Through ROS Generation in Lung Cancer. *Front Pharmacol.* doi: 10.3389/fphar.2020.00391.
184. Mengxue Sun, Jie Hua, Gaoshuang Liu, Peiyun Huang, Ningsheng Liu, Xiaopu He. Myrrh induces the apoptosis and inhibits the proliferation and migration of gastric cancer cells through down-regulating cyclooxygenase-2 expression. *BIOSCIENCE REP.* doi: 10.1042/BSR20192372.
185. Boya Zhang, Shiyu Wan, Xinyu Peng, Mingying Zhao, Sai Li, Yuji Pu, Bin He. Human serum albumin-based doxorubicin prodrug nanoparticles with tumor pH-responsive aggregation-enhanced retention and reduced cardiotoxicity. *J Mater Chem B.* doi: 10.1039/d0tb00327a.
186. Hengwei Deng, Lei Hu, Jingjing Li, Wenyan Yan, Enhui Song, Mingqing Kuang, Shanshan Liu, Jianguo He, Shaoping Weng. The NF- $\kappa$ B family member dorsal plays a role in immune response against Gram-positive bacterial infection in mud crab (*Scylla paramamosain*). *Dev Comp Immunol.* doi: 10.1016/j.dci.2019.103581.
187. Wenjin Wang, Jingfang Feng, Hongying Zhou, Qi Li. Circ\_0123996 promotes cell proliferation and fibrosisin mouse mesangial cells through sponging miR-149-5p and inducing Bach1 expression. *Gene.* doi: 10.1016/j.gene.2020.144971.
188. Yiqun Ji, Jialu Yao, Yang He. Extracellular ubiquitin protects cardiomyocytes during ischemia/hypoxia by inhibiting mitochondrial apoptosis pathway through CXCR4. *Biomed Pharmacother.* doi: 10.1016/j.bioph.2020.110787.
189. Yi Shen, Xiaoyi Zhang, Chenguang Li, Xiang Wang, Yong Ye, Jie Yuan, Hui Gong, Yunzeng Zou, Junbo Ge. Pressure overload promotes cystatin C secretion of cardiomyocytes to regulate the MAPK signaling pathway and mediate cardiac hypertrophy. *Ann Transl Med.* doi: 10.21037/atm-20-7041.
190. Jiajia Hao, Yafen Song, Bin Tian, Changxi Qi, Liping Li, Lumei Wang, Yuxiao Xing, Xiaona Zhao, Jianzhu Liu. Platycodon grandifloras polysaccharides inhibit mitophagy injury induced by Cr (VI) in DF-1 cells. *ECOTOX ENVIRON SAFE.* doi: 10.1016/j.ecoenv.2020.110901.
191. Xiaodan Qu, Peipei Guan, Li Han, Zhanyou Wang, Xueshi Huang. Levistolide A Attenuates Alzheimer's Pathology Through Activation of the PPAR $\gamma$  Pathway. *Neurotherapeutics.* doi: 10.1007/s13311-020-00943-1.
192. Dejun Xu, Huanshan He, Dingbang Liu, Guoxia Geng, Qingwang Li. A novel role of SIRT2 in regulating gap junction communications via connexin-43 in bovine cumulus-oocyte complexes. *J Cell Physiol.* doi: 10.1002/jcp.29634.
193. Yang Liu, Peng Qin, Rong Wu, Lianfang Du, Fan Li. ERas regulates cell proliferation and epithelial-mesenchymal transition by affecting Erk/Akt signaling pathway in pancreatic cancer. *Hum Cell.* doi: 10.1007/s13577-020-00401-2.
194. Yangbiao He, Xujun Lang, Dong Cheng, Ting Zhang, Zhihao Yang, Rongbing Xiong. miR-30a-5p inhibits hypoxia/reoxygenation-induced oxidative stress and apoptosis in HK-2 renal tubular epithelial cells by targeting glutamate dehydrogenase 1 (GLUD1). *Oncol Rep.* doi: 10.3892/or.2020.7718.
195. Ying Long, Xianjin Wu, Zhen Li, Jialong Fan, Xing Hu, Bin Liu. PEGylated WS 2 nanodrug system with erythrocyte membrane coating for chemo/photothermal therapy of cervical cancer. *BIOMATER SCI-UK.* doi: 10.1039/d0bm00972e.
196. Chong Yuan, Meng-Heng Wang, Fei Wang, Peng-Yu Chen, Xin-Ge Ke, Bing Yu, Yan-Fang Yang, Peng-Tao You, He-Zhen Wu. Network pharmacology and molecular docking reveal the mechanism of Scopoletin against non-small cell lung cancer. *Life Sci.* doi: 10.1016/j.lfs.2021.119105.
197. Lin Chen, Jinying Xu, Shuang Lv, Yan Zhao, Dongjie Sun, Yangyang Zheng, Xianglan Li, Lihong Zhang, Guangfan Chi, Yulin Li. Overexpression of long non-coding RNA AP001505.9 inhibits human hyaline chondrocyte dedifferentiation. *AGING-US.* doi: 10.18632/aging.202833.
198. Yanjiao Hou, Hengmin Jia, Yanhong Cao, Shuang Zhang, Xiaolei Zhang, Pingping Wei, Jun Xie, Wenqian Dong, Baolong Wang. LncRNA EPIC1 promotes tumor angiogenesis via activating the Ang2/Tie2 axis in non-small cell lung cancer. *Life Sci.* doi: 10.1016/j.lfs.2020.118933.
199. Jing Luo, Weian Zhao, Yi Gan, Bo Pan, Lingjuan Liu, Zhenguo Liu, Jie Tian. Cardiac Troponin I R193H Mutation Is Associated with Mitochondrial Damage in Cardiomyocytes. *DNA Cell Biol.* doi: 10.1089/dna.2020.5828.
200. Xiangwa Chen, Tao Deng, Tingting Huo, Faqin Dong, Jianjun Deng. MiR-140-

- 5p/TLR4 /NF- $\kappa$ B signaling pathway: Crucial role in inflammatory response in 16HBE cells induced by dust fall PM 2.5. ECOTOX ENVIRON SAFE. doi: 10.1016/j.ecoenv.2020.111414.
201. Guanting Li, Xianwei Wu, Peng Sun, Zhiyang Zhang, Enxian Shao, Jianping Mao, Hua Cao, Hongliang Huang. Dithiolation indolizine exerts viability suppression effects on A549 cells via triggering intrinsic apoptotic pathways and inducing G2/M phase arrest. Biomed Pharmacother. doi: 10.1016/j.bioph.2020.110961.
202. Jin Hou, Ling Zhao, Huaqiao Tang, Xiaoli He, Gang Ye, Fei Shi, Min Kang, Helin Chen, Yinglun Li. Silver Nanoparticles Induced Oxidative Stress and Mitochondrial Injuries Mediated Autophagy in HC11 Cells Through Akt/AMPK/mTOR Pathway. Biol Trace Elem Res. doi: 10.1007/s12011-020-02212-w.
203. Shuo Zhang, Xiaona Zhao, Jiajia Hao, Yiran Zhu, Yue Wang, Lumei Wang, Shuhua Guo, Hui Yi, Yongxia Liu, Jianzhu Liu. The role of ATF6 in Cr(VI)-induced apoptosis in DF-1 cells. J Hazard Mater. doi: 10.1016/j.jhazmat.2020.124607.
204. Xiao-Feng Yue, Chong-Xing Shen, Jian-Wu Wang, Lin-Yong Dai, Qiang Fang, Lei Long, Yi Zhi, Xue-Ru Li, Ya-Wei Wang, Gu-Fang Shen, Zu-Juan Liu, Chun-Meng Shi, Wei-Bing Li. The near-infrared dye IR-61 restores erectile function in a streptozotocin-induced diabetes model via mitochondrial protection. Asian J Androl. doi: 10.4103/aja.aja\_69\_20.
205. Jianwu Wang, Linyong Dai, Xiaofeng Yue, Chongxing Shen, Tong Li, Lei Long, Yi Zhi, Yawei Wang, Gufang Shen, Chunmeng Shi, Yunsheng Liu, Qiang Fang, Weibing Li. IR-61 Improves Voiding Function via Mitochondrial Protection in Diabetic Rats. Front Pharmacol. doi: 10.3389/fphar.2021.608637.
206. Jian Chen, Hui Liu, Xiufang Li, Jianbing Li, Rongdi Tang, Zhiwei Deng, Yanjing Yang, Shian Zhong. Dually acid- and GSH-triggered bis( $\beta$ -cyclodextrin) as drugs delivery nanoplatform for effective anticancer monotherapy. Nanotechnology. doi: 10.1088/1361-6528/abd7b1.
207. Mingshan Li, Zijie Pei, Hongtao Zhang, Jing Qu. Expression Profile of Long Noncoding RNAs and Circular RNAs in Mouse C3H10T1/2 Mesenchymal Stem Cells Undergoing Myogenic and Cardiomyogenic Differentiation. Stem Cells Int. doi: 10.1155/2021/8882264.
208. Shuaishuai Gong, Jincheng Liu, Shiyao Wan, Weiwei Yang, Yuanyuan Zhang, Boyang Yu, Fang Li, Junping Kou. Schisandrol A Attenuates Myocardial Ischemia/Reperfusion-Induced Myocardial Apoptosis through Upregulation of 14-3-3  $\theta$ . Oxid Med Cell Longev. doi: 10.1155/2021/5541753.
209. Yizhe Cui, Qiuju Wang, Renxu Chang, Ahmad Aboragah, Juan J Loor, Chuang Xu. Network Pharmacology-Based Analysis of Pogostemon cablin (Blanco) Benth Beneficial Effects to Alleviate Nonalcoholic Fatty Liver Disease in Mice. Front Pharmacol. doi: 10.3389/fphar.2021.789430.
210. Bing-Xin Chu, Ya-Nan Li, Ning- Liu, Lan-Xin Yuan, Shi-Yan Chen, Yao-Hong Zhu, Jiu-Feng Wang. Salmonella Infantis Delays the Death of Infected Epithelial Cells to Aggravate Bacterial Load by Intermittent Phosphorylation of Akt With SopB. Front Immunol. doi: 10.3389/fimmu.2021.757909.
211. Yinsha Miao, Xiaodong Chen, Mengting Qin, Wen Zhou, Yang Wang, Yanhong Ji. lncRNA GAS5, as a ceRNA, inhibits the proliferation of diffuse large B-cell lymphoma cells by regulating the miR-18a-5p/RUNX1 axis. Int J Oncol. doi: 10.3892/ijo.2021.5274.
212. Baocheng Xie, Zhanwei Zeng, Shiyi Liao, Chenhui Zhou, Longhuo Wu, Daohua Xu. Kaempferol Ameliorates the Inhibitory Activity of Dexamethasone in the Osteogenesis of MC3T3-E1 Cells by JNK and p38-MAPK Pathways. Front Pharmacol. doi: 10.3389/fphar.2021.739326.
213. Yu Chen, Yuhui Jiang, Yinuo Yang, Xinzhong Huang, Cheng Sun. SIRT1 Protects Dopaminergic Neurons in Parkinson's Disease Models via PGC-1  $\alpha$ -Mediated Mitochondrial Biogenesis. Neurotox Res. doi: 10.1007/s12640-021-00392-4.
214. Jingyan Shu, Hongtao Liu, Yang Liu, Xindi Chen, Yu Yu, Qianghua Lv, Jianfeng Wang, Xuming Deng, Zhimin Guo, Jiazhang Qiu. Tannic Acid Inhibits *Salmonella enterica* Serovar Typhimurium Infection by Targeting the Type III Secretion System. Front Microbiol. doi: 10.3389/fmicb.2021.784926.
215. Qingwen Yuan, Renjun Peng, Huijie Yu, Sinian Wang, Zhongmin Chen, Suhe Dong, Wei Li, Bo Cheng, Qisheng Jiang, Yuwen Cong, Fengsheng Li, Changzheng Li. Disulfiram Protects Against Radiation-Induced Intestinal Injury in Mice. Front Pharmacol. doi: 10.3389/fphar.2022.852669.
216. Bei Yan, Panpan Liu, Xiaoqin Yi, Jie Li, Nian Liu, Wu Zhu, Yehong Kuang, Xiang Chen, Cong Peng. Topical VX-509 attenuates psoriatic inflammation through the STAT3/FABP5 pathway in keratinocytes. Pharmacol Res. doi: 10.1016/j.phrs.2022.106318.
217. Xiangze Li, Zhan Su, Kaiying Shen, Qi Wang, Chencheng Xu, Fuqiang Wang, Yuchi Zhang, Dapeng Jiang. Eugenol-Preconditioned Mesenchymal Stem Cell-Derived Extracellular Vesicles Promote Antioxidant Capacity of Tendon Stem Cells In Vitro and In Vivo. Oxid Med Cell Longev. doi: 10.1155/2022/3945195.
218. Jian Luo, Jinzhi Xu, Chaolu Xie, Zuoming Zhao, Junrui Guo, Yuan Wen, Tian Li, Zeyang Zhou. Microsporidia Promote Host Mitochondrial Fragmentation by Modulating DRP1 Phosphorylation. Int J Mol Sci. doi: 10.3390/ijms23147746.
219. An Yan, Jie Xiong, Jiadong Zhu, Xiangyu Li, Shuting Xu, Xiaoyu Feng, Xin Ke, Zhenyi Wang, Yang Chen, Hong-Wei Wang, Michael Q Zhang, Kehkooi Kee. DAZL regulates proliferation of human primordial germ cells by direct binding to precursor miRNAs and enhances DICER processing activity. Nucleic Acids Res. doi: 10.1093/nar/gkac856.
220. Zongkun Hou, Run Meng, Ganghua Chen, Tangmin Lai, Rui Qing, Shilei Hao, Jia Deng, Bochu Wang. Distinct accumulation of nanoplastics in human intestinal organoids. Sci Total Environ. doi: 10.1016/j.scitotenv.2022.155811.
221. Wenpeng Zhao, Maolin Xu, Herman W Barkema, Xiaochen Xie, Yushan Lin, Sohrab Khan, John P Kastelic, Dong Wang, Zhaoju Deng, Bo Han. *Protothea bovis* induces autophagy in bovine mammary epithelial cells via the HIF-1 $\alpha$  and AMPK/ULK1 pathway. Front Immunol. doi: 10.3389/fimmu.2022.934819.
222. Huiqin Zhou, Wei Zhang, Danxue Qin, Peiqiang Liu, Wenjun Fan, Hao Lv, Lu Tan, Ziang Gao, Yu Xu. Activation of NLRP3 inflammasome contributes to the inflammatory response to allergic rhinitis via macrophage pyroptosis. Int Immunopharmacol. doi: 10.1016/j.intimp.2022.109012.
223. Qi-Qi Song, Li-Ping Lin, Ya-Li Chen, Jia-Cheng Qian, Ke Wei, Jian-Wei Su, Jian-Hua Ding, Ming Lu, Yang Liu, Ren-Xiang Tan, Gang Hu. Characterization of LTr1 derived from cruciferous vegetables as a novel anti-glioma agent via inhibiting TrkA/PI3K/AKT pathway. Acta Pharmacol Sin. doi: 10.1038/s41401-022-01033-y.

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