碧云天网站 微信公众号

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

BCA蛋白浓度测定试剂盒(增强型)

产品编号	产品名称	包装
P0010	BCA蛋白浓度测定试剂盒(增强型)	500次

产品简介:

- BCA蛋白浓度测定试剂盒(增强型) (Enhanced BCA Protein Assay Kit)是根据目前世界上最常用的两种蛋白浓度检测方法之一BCA法研制而成，实现了蛋白浓度测定的简单、高稳定性、高灵敏度和高兼容性。
- 和碧云天生产的普通BCA蛋白浓度测定试剂盒相比，灵敏度更高，检测浓度下限达到10μg/ml，最小检测蛋白量达到0.2μg，待测样品体积为1-20μl。
- 和碧云天生产的普通BCA蛋白浓度测定试剂盒相比，显色速度更快，相同的样品孵育较短时间即可进行吸光度测定。
- 在20-1000μg/ml浓度范围内有较好的线性关系。本产品从0.025到0.5mg/ml的标准曲线参考图1。

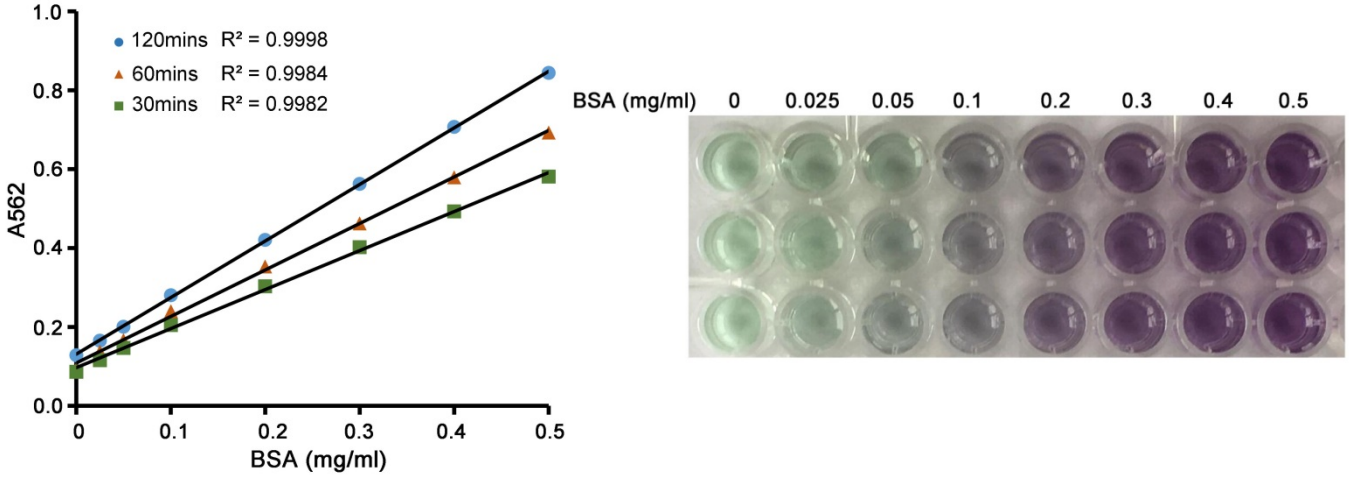

图1. 本试剂盒蛋白标准曲线的效果图。左图为加入BCA工作液后37°C分别孵育30、60和120分钟后的吸光度实测效果图，右图为37°C孵育60分钟时的实拍显色效果图。图中数据仅供参考，实际的检测效果可能会略有不同。

- BCA法测定蛋白浓度不受绝大部分样品中的化学物质的影响，可以兼容样品中高达5%的SDS，5%的Triton X-100，5%的Tween20、60、80。但本试剂盒受螯合剂和略高浓度的还原剂的影响，需确保EDTA低于10mM，无EGTA，二硫苏糖醇(DTT)低于1mM，β-巯基乙醇(β-Mercaptoethanol)低于0.01%。不适用BCA法时建议试用碧云天生产的Bradford蛋白浓度测定试剂盒(P0006)。
- BCA蛋白浓度测定试剂盒(增强型)对样品中各种物质的详细的兼容性和普通的BCA蛋白浓度测定试剂盒相同，请参考碧云天如下网页:
  http://www.beyotime.com/Compatibility Chart For BCA Kit.pdf
- 每个试剂盒可以检测500个样品。

包装清单:

产品编号	产品名称	包装
P0010-1	BCA试剂 A	100ml
P0010-2	BCA试剂 B	3ml
P0010-3	蛋白标准(BSA)	30mg
P0010-4	蛋白标准配制液	1.5ml
—	说明书	1份

保存条件:

室温保存。蛋白标准配制成溶液后-20°C冻存。

注意事项:

- 需酶标仪一台，测定波长为540-595nm之间，562nm最佳。需96孔板。如果没有酶标仪，也可以使用普通的分光光度计测定，但

测定时，需根据比色皿的最小检测体积，适当加大BCA工作液的用量使不小于最小检测体积，样品和标准品的用量可相应按比例放大也可不变。使用分光光度计测定蛋白浓度时，每个试剂盒可以测定的样品数量可能会显著减少。

- 如发现样品稀释液或裂解液本身就有较高背景，请试用碧云天生产的Bradford蛋白浓度测定试剂盒(P0006)。
- 为了加快BCA法测定蛋白浓度的速度可以适当用微波炉加热，但是切勿过热。
- EDTA浓度必须小于10mM，不兼容EGTA。不适用BCA法时，请试用碧云天生产的Bradford蛋白浓度测定试剂盒(P0006)。
- 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. 蛋白标准品的准备

a. 取1.2ml蛋白标准配制液加入到一管蛋白标准(30mg BSA)中，充分溶解后配制成**25mg/ml**的蛋白标准溶液。配制后可立即使用，也可以-20°C长期保存。

b. 取适量25mg/ml蛋白标准，稀释至终浓度为**0.5mg/ml**。例如取20μl 25mg/ml蛋白标准，加入980μl稀释液即可配制成0.5mg/ml蛋白标准。蛋白样品在什么溶液中，标准品也宜用什么溶液稀释。但是为了简便起见，也可以用0.9% NaCl或PBS稀释标准品。稀释后的0.5mg/ml蛋白标准可以-20°C长期保存。

2. BCA工作液的配制

根据样品数量，按50体积BCA试剂A加1体积BCA试剂B(**50:1**)配制适量BCA工作液，充分混匀。例如5ml BCA试剂A加100μl BCA试剂B，混匀，配制成5.1ml BCA工作液。BCA工作液室温24小时内稳定。

3. 蛋白浓度检测

a. 将标准品按0、1、2、4、8、12、16、20μl加到96孔板的标准品孔中，加标准品稀释液**补足到20μl**，相当于标准品浓度分别为0、0.025、0.05、0.1、0.2、0.3、0.4、0.5mg/ml。

b. 加适当体积样品到96孔板的样品孔中。如果样品不足20μl，加标准品稀释液补足到20μl。请注意记录样品体积。

c. 各孔加入**200μl BCA工作液**，37°C放置20-30分钟。
注：也可以室温放置2小时，或60°C放置30分钟。BCA法测定蛋白浓度时，颜色会随着时间的延长不断加深。并且显色反应会因温度升高而加快。如果浓度较低，适合在较高温度孵育，或适当延长孵育时间。

d. 用酶标仪测定A562，或540-595nm之间的波长的吸光度。

e. 根据标准曲线和使用的样品体积计算出样品的蛋白浓度。

常见问题：

1. 测定标准曲线时发现随着标准品浓度的增加吸光度或颜色没有明显变化。

可能的原因是样品中含有严重干扰BCA法测定蛋白浓度的物质，详细的BCA法的兼容性列表请参考碧云天如下网页:
http://www.beyotime.com/Compatibility Chart For BCA Kit.pdf

2. 是否每次测定时都需要做标准曲线?

建议每次测定时都做标准曲线。因为BCA法测定时颜色会随着时间的延长不断加深，并且显色反应的速度和温度有关，所以除非精确控制显色反应的时间和温度，否则如需精确测定宜每次都做标准曲线。

相关产品：

产品编号	产品名称	包装
P0006	Bradford蛋白浓度测定试剂盒	1000次
P0006C	Bradford蛋白浓度测定试剂盒(去垢剂兼容型)	800次
P0007	蛋白标准(5mg/ml BSA)	1ml
P0009	BCA蛋白浓度测定试剂盒(增强型)	5000次
P0010	BCA蛋白浓度测定试剂盒(增强型)	500次
P0010S	BCA蛋白浓度测定试剂盒(增强型)	200次
P0011	BCA蛋白浓度测定试剂盒	5000次
P0012	BCA蛋白浓度测定试剂盒	500次
P0012S	BCA蛋白浓度测定试剂盒	200次

使用本产品的文献：

1. Wu RC, Wang z, Liu MJ, Chen DF, Yue XS. β2-integrins mediate a novel form ofchemoresistance in cycloheximide-induced U937 apoptosis. CELL MOL LIFE SCI 2004;61(16):2071–82.
2. Liu MJ, Yue PY, Wang Z, Wong RN. Methyl protodioscin induces G2/M arrest and apoptosis in K562 cells with the hyperpolarization of mitochondria. Cancer Lett 2005;224:229–41.
3. Yi ZC, Liu YZ, Li HX, Yin Y, Zhuang FY, Fan YB, Wang Z. Tellimagrandin I enhances gap junctional communication and attenuates the tumor phenotype of human cervical carcinoma HeLa cells in vitro. Cancer Lett 2006 Oct 8;242(1):77-87.
4. Huang YY, Deng JY, Gu J, Zhang ZP, Maxwell A, Bi LJ, Chen YY, Zhou YF, Yu ZN, Zhang XE. The key DNA-binding residues in the C-terminal domain of Mycobacterium tuberculosis DNA gyrase A subunit (GyrA). Nucleic Acids Res 2006;34(19):5650-9.
5. Yu S, Geng J, Zhou P, Wang J, Feng A, Chen X, Tong H, Hu J. Application of a new hybrid organic-inorganic monolithic column for efficient deoxyribonucleic acid purification. Anal Chim Acta 2008 Mar 24;611(2):173-81.
6. Jin C, Liu X, Tan L, Cui Z, Yang X, Zheng Y, Yeung KWK, Chu PK, Wu S Ag/AgBr-loaded mesoporous silica for rapid sterilization and promotion of wound

healing. BIOMATER SCI-UK 2018 Jun 25;6(7):1735-1744.

7. Lu YT, Li LZ, Yang YL, Yin X, Liu Q, Zhang L, Liu K, Liu B, Li J, Qi LW Succinate induces aberrant mitochondrial fission in cardiomyocytes through GPR91 signaling. Cell Death Dis 2018 Jun 4;9(6):672.
8. Tian B, Wang Z, Zhao Y, Wang D, Li Y, Ma L, Li X, Li J, Xiao N, Tian J, Rodriguez R. Effects of curcumin on bladder cancer cells and development of urothelial tumors in a rat bladder carcinogenesis model. Cancer Lett 2008 Jun 18;264(2):299-308.
9. Zhu M, Gu F, Shi J, Hu J, Hu Y, Zhao Z. Increased oxidative stress and astrogliosis responses in conditional double-knockout mice of Alzheimer-like presenilin-1 and presenilin-2. FREE RADICAL BIO MED 2008 Nov 15;45(10):1493-9.
10. Liu XS, Jiang J, Jiao XY, Wu YE, Lin JH, Cai YM. Lycorine induces apoptosis and down-regulation of Mcl-1 in human leukemia cells. Cancer Lett 2009 Feb 8;274(1):16-24.
11. Xiao X, Liu A, Wen H, Tian Y, Ni J, Liu G. Expression and localization of transcription factor Ets-1 in the rat ovary during the estrous cycle and pregnancy. Fertil Steril 2009 May;91(5 Suppl):1998-2005.
12. 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.
13. Liao Z, Huang C, Zhou F, Xiong J, Bao J, Zhang H, Sun W, Xie C, Zhou Y. Radiation enhances suicide gene therapy in radioresistant laryngeal squamous cell carcinoma via activation of a tumor-specific promoter. Cancer Lett 2009 Sep 28;283(1):20-8.
14. 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.
15. Xu Y, Ge R, Du J, Xin H, Yi T, Sheng J, Wang Y, Ling C. Corosolic acid induces apoptosis through mitochondrial pathway and caspase activation in human cervix adenocarcinoma HeLa cells. Cancer Lett 2009 Nov 1;284(2):229-37.
16. Yuan D, Pan Y, Zhang J, Shao C. Role of nuclear factor-kappaB and P53 in radioadaptive response in Chang live cells. MUTAT RES-REV MUTAT 2010 Jun 1;688(1-2):66-71.
17. Wu GJ, Zhou LZ, Wang KW, Chen F, Sun Y, Duan YR, Zhu YJ, Gu HC. Hydroxylapatite nanorods: An efficient and promising carrier for gene transfection. J COLLOID INTERF SCI 2010 May 15;345(2):427-32.
18. Liu PS, Chen Q, Wu SS, Shen J, Lin SC. Surface modification of cellulose membranes with zwitterionic polymers for resistance to protein adsorption and platelet adhesion. Journal of Membrane Science 2010;350:387–94.
19. Wu W, Yan C, Gan T, Chen Z, Lu X, Duerksen-Hughes PJ, Zhu X, Yang J. Nuclear proteome analysis of cisplatin-treated HeLa cells. MUTAT RES-REV MUTAT 2010;691(1-2):1-8.
20. Mao J, Duan S, Song A, Cai Q, Deng X, Yang X. Macroporous and Nanofribrous Poly (Lactide-co-Glycolide)(50/50) Scaffolds Via Phase Separation Combined with Particle-Leaching. MAT SCI ENG C-MATER 2012 Aug 1;32(6):1407-1414.
21. Yang D, Li L, Liu H, Wu L, Luo Z, Li H, Zheng S, Gao H, Chu Y, Sun Y, Liu J, Jia L. Induction of autophagy and senescence by knockdown of ROC1 E3 ubiquitin ligase to suppress the growth ofliver cancer cells. Cell Death Differ 2013 Feb;20(2):235-47.
22. Yang F, Wang J, Hou J, Guo H, Liu C. Bone regeneration using cell-mediated responsive degradable PEG-based scaffolds incorporating with rhBMP-2. Biomaterials 2013 Feb;34(5):1514-28.
23. Yu C, Zhou Z, Wang J, Sun J, Liu W, Sun Y, Kong B, Yang H, Yang S. In depth analysis of apoptosis induced by silica coated manganese oxide nanoparticles in vitro. J Hazard Mater 2015;283:519-28.
24. Zhou J, Wang Z, Li Q, Liu F, Du Y, Yuan H, Hu F, Wei Y, You J. Hybridized doxorubicin-Au nanospheres exhibit enhanced near-infrared surface plasmon absorption for photothermal therapy applications. Nanoscale 2015 Mar 19;7(13):5869-83.
25. Xu Y, Xiang J, Zhao H, Liang H, Huang J, Li Y, Pan J, Zhou H, Zhang X, Wang JH, Liu Z, Wang J. Human amniotic fluid stem cells labeled with up-conversion nanoparticles for imaging-monitored repairingof acute lung injury. Biomaterials 2016 Sep;100:91-100.
26. Huang L, Zhou B, Wu H, Zheng L, Zhao J. Effect of apatite formation of biphasic calcium phosphate ceramic (BCP) on osteoblastogenesis usingsimulated body fluid (SBF) with or without bovine serum albumin (BSA). MAT SCI ENG C-MATER 2017 Jan 1;70(Pt 2):955-961.
27. He PF, He L, Zhang AQ, Wang XL, Qu L, Sun PL. Structure and chain conformation of a neutral polysaccharide from sclerotia of Polyporus umbellatus. CARBOHYD POLYM 2017 Jan 2;155:61-67.
28. Chen L, Ran Q, Xiang Y, Xiang L, Chen L, Li F, Wu J, Wu C, Li Z. Co-Activation of PKC-δ by CRIF1 Modulates Oxidative Stress in Bone Marrow Multipotent Mesenchymal Stromal Cells after Irradiation by Phosphorylating NRF2 Ser40. Theranostics 2017 Jun 25;7(10):2634-2648.
29. Li R, Luo X, Zhu Y, Zhao L, Li L, Peng Q, Ma M, Gao Y. ATM signals to AMPK to promote autophagy and positively regulate DNA damage in response to cadmium-induced ROS in mouse spermatocytes. Environ Pollut 2017 Dec;231(Pt 2):1560-1568.
30. Xu X, Xia L, Chen W, Huang Q. Detoxification of hexavalent chromate by growing Paecilomyces lilacinus XLA. Environ Pollut 2017 Jun;225:47-54.
31. Wang B, Lian YJ, Su WJ, Peng W, Dong X, Liu LL, Gong H, Zhang T, Jiang CL, Wang YX. HMGB1 mediates depressive behavior induced by chronic stress through activating the kynurenine pathway. Brain Behav Immun 2017 Nov 28.
32. Zhang Y, Dong C, Yang S, Wu J, Xiao K, Huang Y, Li X. Alkalescent nanotube films on a titanium-based implant: A novel approach to enhance biocompatibility. MAT SCI ENG C-MATER 2017 Mar 1;72:464-471.
33. Li SL, Yan J, Zhang YQ, Zhen CL, Liu MY, Jin J, Gao JL, Xiao XL, Shen X, Tai Y, Hu N, Zhang XZ, Sun ZJ, Dong DL. Niclosamide ethanolamine inhibits artery constriction. Pharmacol Res 2017 Jan;115:78-86.
34. Lian YJ, Gong H, Wu TY, Su WJ, Zhang Y, Yang YY, Peng W, Zhang T, Zhou JR, Jiang CL, Wang YX. Ds-HMGB1 and fr-HMGB induce depressive behavior through neuroinflammation in contrast to nonoxid-HMGB1. Brain Behav Immun 2017 Jan;59:322-332.
35. Wang C, Hou W, Guo X, Li J, Hu T, Qiu M, Liu S, Mo X, Liu X. Two-phase electrospinning to incorporate growth factors loaded chitosan nanoparticles into electrospun fibrous scaffolds for bioactivity retention and cartilage regeneration. MAT SCI ENG C-MATER 2017 Oct 1;79:507-515.
36. Sui X, Zhang C, Zhou J, Cao S, Xu C, Tang F, Zhi X, Chen B, Wang S, Yin L. Resveratrol inhibits Extranodal NK/T cell lymphoma through activation of DNA damage response pathway. J EXP CLIN CANC RES 2017 Sep 26;36(1):133.
37. Pan YJ, Wei LL, Wu XJ, Huo FC, Mou J, Pei DS. MiR-106a-5p inhibits the cell migration and invasion of renal cell carcinoma through targeting PAK5. Cell Death Dis 2017 Oct 26;8(10):e3155.
38. Huang C, Li N, Yuan S, Ji X, Ma M, Rao K, Wang Z. Aryl- and alkyl-phosphorus-containing flame retardants induced mitochondrial impairment and cell death in Chinese hamster ovary (CHO-k1) cells. Environ Pollut 2017 Nov;230:775-786.
39. Shen H, Liu C, Zhang D, Yao X, Zhang K, Li H, Chen G. Role for RIP1 in mediating necroptosis in experimental intracerebral hemorrhage model both in vivo and in vitro. Cell Death Dis 2017 Mar 2;8(3):e2641.
40. Hou X, Yang C, Zhang L, Hu T, Sun D, Cao H, Yang F, Guo G, Gong C, Zhang X, Tong A, Li R, Zheng Y. Killing colon cancer cells through PCD pathways by a novel hyaluronic acid-modified shell-core nanoparticle loaded with RIP3 in combination with chloroquine. Biomaterials 2017 Apr;124:195-210.
41. Fan T, Pi H, Li M, Ren Z, He Z, Zhu F, Tian L, Tu M, Xie J, Liu M, Li Y, Tan M, Li G, Qing W, Reiter RJ, Yu Z, Wu H, Zhou Z. Inhibiting MT2-TFE3-dependent autophagy enhances melatonin-induced apoptosis in tongue squamous cell carcinoma. J Pineal Res 2018 Mar;64(2).
42. Li X, Li X, Han B, Zhao Y, Li T, Zhao P, Yu X Improvement in lipid production in Monoraphidium sp. QLY-1 by combining fulvic acid treatment and salinity stress.

BIORESOURCE TECHNOL 2019 Dec 294:122179.

43. Wu RC, Wang z, Liu MJ, Chen DF, Yue XS. β2-integrins mediate a novel form ofchemoresistance in cycloheximide-induced U937 apoptosis. CELL MOL LIFE SCI 2004;61(16):2071–82.
44. Liu MJ, Yue PY, Wang Z, Wong RN. Methyl protodioscin induces G2/M arrest and apoptosis in K562 cells with the hyperpolarization of mitochondria. Cancer Lett 2005;224:229–41.
45. Yi ZC, Liu YZ, Li HX, Yin Y, Zhuang FY, Fan YB, Wang Z. Tellimagrandin I enhances gap junctional communication and attenuates the tumor phenotype of human cervical carcinoma HeLa cells in vitro. Cancer Lett 2006 Oct 8;242(1):77-87.
46. Huang YY, Deng JY, Gu J, Zhang ZP, Maxwell A, Bi LJ, Chen YY, Zhou YF, Yu ZN, Zhang XE. The key DNA-binding residues in the C-terminal domain of Mycobacterium tuberculosis DNA gyrase A subunit (GyrA). Nucleic Acids Res 2006;34(19):5650-9.
47. Yu S, Geng J, Zhou P, Wang J, Feng A, Chen X, Tong H, Hu J. Application of a new hybrid organic-inorganic monolithic column for efficient deoxyribonucleic acid purification. Anal Chim Acta 2008 Mar 24;611(2):173-81.
48. Tian B, Wang Z, Zhao Y, Wang D, Li Y, Ma L, Li X, Li J, Xiao N, Tian J, Rodriguez R. Effects of curcumin on bladder cancer cells and development of urothelial tumors in a rat bladder carcinogenesis model. Cancer Lett 2008 Jun 18;264(2):299-308.
49. Zhu M, Gu F, Shi J, Hu J, Hu Y, Zhao Z. Increased oxidative stress and astrogliosis responses in conditional double-knockout mice of Alzheimer-like presenilin-1 and presenilin-2. FREE RADICAL BIO MED 2008 Nov 15;45(10):1493-9.
50. Liu XS, Jiang J, Jiao XY, Wu YE, Lin JH, Cai YM. Lycorine induces apoptosis and down-regulation of Mcl-1 in human leukemia cells. Cancer Lett 2009 Feb 8;274(1):16-24.
51. Xiao X, Liu A, Wen H, Tian Y, Ni J, Liu G. Expression and localization of transcription factor Ets-1 in the rat ovary during the estrous cycle and pregnancy. Fertil Steril 2009 May;91(5 Suppl):1998-2005.
52. 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.
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. Liao Z, Huang C, Zhou F, Xiong J, Bao J, Zhang H, Sun W, Xie C, Zhou Y. Radiation enhances suicide gene therapy in radioresistant laryngeal squamous cell carcinoma via activation of a tumor-specific promoter. Cancer Lett 2009 Sep 28;283(1):20-8.
55. Liao Z, Huang C, Zhou F, Xiong J, Bao J, Zhang H, Sun W, Xie C, Zhou Y. Radiation enhances suicide gene therapy in radioresistant laryngeal squamous cell carcinoma via activation of a tumor-specific promoter. Cancer Lett 2009 Sep 28;283(1):20-8.
56. 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.
57. 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.
58. Xu Y, Ge R, Du J, Xin H, Yi T, Sheng J, Wang Y, Ling C. Corosolic acid induces apoptosis through mitochondrial pathway and caspase activation in human cervix adenocarcinoma HeLa cells. Cancer Lett 2009 Nov 1;284(2):229-37.
59. Xu Y, Ge R, Du J, Xin H, Yi T, Sheng J, Wang Y, Ling C. Corosolic acid induces apoptosis through mitochondrial pathway and caspase activation in human cervix adenocarcinoma HeLa cells. Cancer Lett 2009 Nov 1;284(2):229-37.
60. Yuan D, Pan Y, Zhang J, Shao C. Role of nuclear factor-kappaB and P53 in radioadaptive response in Chang live cells. MUTAT RES-REV MUTAT 2010 Jun 1;688(1-2):66-71.
61. Yuan D, Pan Y, Zhang J, Shao C. Role of nuclear factor-kappaB and P53 in radioadaptive response in Chang live cells. MUTAT RES-REV MUTAT 2010 Jun 1;688(1-2):66-71.
62. Wu GJ, Zhou LZ, Wang KW, Chen F, Sun Y, Duan YR, Zhu YJ, Gu HC. Hydroxylapatite nanorods: An efficient and promising carrier for gene transfection. J COLLOID INTERF SCI 2010 May 15;345(2):427-32.
63. Wu GJ, Zhou LZ, Wang KW, Chen F, Sun Y, Duan YR, Zhu YJ, Gu HC. Hydroxylapatite nanorods: An efficient and promising carrier for gene transfection. J COLLOID INTERF SCI 2010 May 15;345(2):427-32.
64. Liu PS, Chen Q, Wu SS, Shen J, Lin SC. Surface modification of cellulose membranes with zwitterionic polymers for resistance to protein adsorption and platelet adhesion. Journal of Membrane Science 2010;350:387–94.
65. Liu PS, Chen Q, Wu SS, Shen J, Lin SC. Surface modification of cellulose membranes with zwitterionic polymers for resistance to protein adsorption and platelet adhesion. Journal of Membrane Science 2010;350:387–94.
66. Wu W, Yan C, Gan T, Chen Z, Lu X, Duerksen-Hughes PJ, Zhu X, Yang J. Nuclear proteome analysis of cisplatin-treated HeLa cells. MUTAT RES-REV MUTAT 2010;691(1-2):1-8.
67. Wu W, Yan C, Gan T, Chen Z, Lu X, Duerksen-Hughes PJ, Zhu X, Yang J. Nuclear proteome analysis of cisplatin-treated HeLa cells. MUTAT RES-REV MUTAT 2010;691(1-2):1-8.
68. Mao J, Duan S, Song A, Cai Q, Deng X, Yang X. Macroporous and Nanofribrous Poly (Lactide-co-Glycolide)(50/50) Scaffolds Via Phase Separation Combined with Particle-Leaching. MAT SCI ENG C-MATER 2012 Aug 1;32(6):1407-1414.
69. Mao J, Duan S, Song A, Cai Q, Deng X, Yang X. Macroporous and Nanofribrous Poly (Lactide-co-Glycolide)(50/50) Scaffolds Via Phase Separation Combined with Particle-Leaching. MAT SCI ENG C-MATER 2012 Aug 1;32(6):1407-1414.
70. Yang D, Li L, Liu H, Wu L, Luo Z, Li H, Zheng S, Gao H, Chu Y, Sun Y, Liu J, Jia L. Induction of autophagy and senescence by knockdown of ROC1 E3 ubiquitin ligase to suppress the growth ofliver cancer cells. Cell Death Differ 2013 Feb;20(2):235-47.
71. Yang D, Li L, Liu H, Wu L, Luo Z, Li H, Zheng S, Gao H, Chu Y, Sun Y, Liu J, Jia L. Induction of autophagy and senescence by knockdown of ROC1 E3 ubiquitin ligase to suppress the growth ofliver cancer cells. Cell Death Differ 2013 Feb;20(2):235-47.
72. Yang F, Wang J, Hou J, Guo H, Liu C. Bone regeneration using cell-mediated responsive degradable PEG-based scaffolds incorporating with rhBMP-2. Biomaterials 2013 Feb;34(5):1514-28.
73. Yang F, Wang J, Hou J, Guo H, Liu C. Bone regeneration using cell-mediated responsive degradable PEG-based scaffolds incorporating with rhBMP-2. Biomaterials 2013 Feb;34(5):1514-28.
74. Yu C, Zhou Z, Wang J, Sun J, Liu W, Sun Y, Kong B, Yang H, Yang S. In depth analysis of apoptosis induced by silica coated manganese oxide nanoparticles in vitro. J Hazard Mater 2015;283:519-28.
75. Yu C, Zhou Z, Wang J, Sun J, Liu W, Sun Y, Kong B, Yang H, Yang S. In depth analysis of apoptosis induced by silica coated manganese oxide nanoparticles in vitro. J Hazard Mater 2015;283:519-28.
76. Zhou J, Wang Z, Li Q, Liu F, Du Y, Yuan H, Hu F, Wei Y, You J. Hybridized doxorubicin-Au nanospheres exhibit enhanced near-infrared surface plasmon absorption for photothermal therapy applications. Nanoscale 2015 Mar 19;7(13):5869-83.
77. Zhou J, Wang Z, Li Q, Liu F, Du Y, Yuan H, Hu F, Wei Y, You J. Hybridized doxorubicin-Au nanospheres exhibit enhanced near-infrared surface plasmon absorption for photothermal therapy applications. Nanoscale 2015 Mar 19;7(13):5869-83.
78. Xu Y, Xiang J, Zhao H, Liang H, Huang J, Li Y, Pan J, Zhou H, Zhang X, Wang JH, Liu Z, Wang J. Human amniotic fluid stem cells labeled with up-conversion nanoparticles for imaging-monitored repairingof acute lung injury. Biomaterials 2016 Sep;100:91-100.
79. Xu Y, Xiang J, Zhao H, Liang H, Huang J, Li Y, Pan J, Zhou H, Zhang X, Wang JH, Liu Z, Wang J. Human amniotic fluid stem cells labeled with up-conversion

nanoparticles for imaging-monitored repairingof acute lung injury. Biomaterials 2016 Sep;100:91-100.

80. Huang L, Zhou B, Wu H, Zheng L, Zhao J. Effect of apatite formation of biphasic calcium phosphate ceramic (BCP) on osteoblastogenesis usingsimulated body fluid (SBF) with or without bovine serum albumin (BSA). MAT SCI ENG C-MATER 2017 Jan 1;70(Pt 2):955-961.
81. Huang L, Zhou B, Wu H, Zheng L, Zhao J. Effect of apatite formation of biphasic calcium phosphate ceramic (BCP) on osteoblastogenesis usingsimulated body fluid (SBF) with or without bovine serum albumin (BSA). MAT SCI ENG C-MATER 2017 Jan 1;70(Pt 2):955-961.
82. Zhao P, Guo Y, Zhang W, Chai H, Xing H, Xing M. Neurotoxicity induced by arsenic in Gallus Gallus: Regulation of oxidative stress and heat shock proteinresponse. Chemosphere 2017 Jan;166:238-245.
83. Zhao P, Guo Y, Zhang W, Chai H, Xing H, Xing M. Neurotoxicity induced by arsenic in Gallus Gallus: Regulation of oxidative stress and heat shock proteinresponse. Chemosphere 2017 Jan;166:238-245.
84. He PF, He L, Zhang AQ, Wang XL, Qu L, Sun PL. Structure and chain conformation of a neutral polysaccharide from sclerotia of Polyporus umbellatus. CARBOHYD POLYM 2017 Jan 2;155:61-67.
85. He PF, He L, Zhang AQ, Wang XL, Qu L, Sun PL. Structure and chain conformation of a neutral polysaccharide from sclerotia of Polyporus umbellatus. CARBOHYD POLYM 2017 Jan 2;155:61-67.
86. Zhao P, Guo Y, Zhang W, Chai H, Xing H, Xing M. Neurotoxicity induced by arsenic in Gallus Gallus: Regulation of oxidative stress and heat shock protein response. Chemosphere 2017 Jan;166:238-245.
87. Li S, Zhao H, Wang Y, Shao Y, Li J, Liu J, Xing M. The inflammatory responses in Cu-mediated elemental imbalance is associated with mitochondrial fission and intrinsic apoptosis in Gallus gallus heart. Chemosphere 2017 Dec;189:489-497.
88. Wang C, Hou W, Guo X, Li J, Hu T, Qiu M, Liu S, Mo X, Liu X. Two-phase electrospinning to incorporate growth factors loaded chitosan nanoparticles into electrospun fibrous scaffolds for bioactivity retention and cartilage regeneration. MAT SCI ENG C-MATER 2017 Oct 1;79:507-515.
89. Sui X, Zhang C, Zhou J, Cao S, Xu C, Tang F, Zhi X, Chen B, Wang S, Yin L. Resveratrol inhibits Extranodal NK/T cell lymphoma through activation of DNA damage response pathway. J EXP CLIN CANC RES 2017 Sep 26;36(1):133.
90. Zhao P, Guo Y, Zhang W, Chai H, Xing H, Xing M. Neurotoxicity induced by arsenic in Gallus Gallus: Regulation of oxidative stress and heat shock protein response. Chemosphere 2017 Jan;166:238-245.
91. Li S, Zhao H, Wang Y, Shao Y, Li J, Liu J, Xing M. The inflammatory responses in Cu-mediated elemental imbalance is associated with mitochondrial fission and intrinsic apoptosis in Gallus gallus heart. Chemosphere 2017 Dec;189:489-497.
92. Wang C, Hou W, Guo X, Li J, Hu T, Qiu M, Liu S, Mo X, Liu X. Two-phase electrospinning to incorporate growth factors loaded chitosan nanoparticles into electrospun fibrous scaffolds for bioactivity retention and cartilage regeneration. MAT SCI ENG C-MATER 2017 Oct 1;79:507-515.
93. Pan YJ, Wei LL, Wu XJ, Huo FC, Mou J, Pei DS. MiR-106a-5p inhibits the cell migration and invasion of renal cell carcinoma through targeting PAK5. Cell Death Dis 2017 Oct 26;8(10):e3155.
94. Huang C, Li N, Yuan S, Ji X, Ma M, Rao K, Wang Z. Aryl- and alkyl-phosphorus-containing flame retardants induced mitochondrial impairment and cell death in Chinese hamster ovary (CHO-k1) cells. Environ Pollut 2017 Nov;230:775-786.
95. Sui X, Zhang C, Zhou J, Cao S, Xu C, Tang F, Zhi X, Chen B, Wang S, Yin L. Resveratrol inhibits Extranodal NK/T cell lymphoma through activation of DNA damage response pathway. J EXP CLIN CANC RES 2017 Sep 26;36(1):133.
96. Shen H, Liu C, Zhang D, Yao X, Zhang K, Li H, Chen G. Role for RIP1 in mediating necroptosis in experimental intracerebral hemorrhage model both in vivo and in vitro. Cell Death Dis 2017 Mar 2;8(3):e2641.
97. Pan YJ, Wei LL, Wu XJ, Huo FC, Mou J, Pei DS. MiR-106a-5p inhibits the cell migration and invasion of renal cell carcinoma through targeting PAK5. Cell Death Dis 2017 Oct 26;8(10):e3155.
98. Huang C, Li N, Yuan S, Ji X, Ma M, Rao K, Wang Z. Aryl- and alkyl-phosphorus-containing flame retardants induced mitochondrial impairment and cell death in Chinese hamster ovary (CHO-k1) cells. Environ Pollut 2017 Nov;230:775-786.
99. Li S, Wang Y, Zhao H, He Y, Li J, Jiang G, Xing M. NF-κB-mediated inflammation correlates with calcium overload under arsenic trioxide-induced myocardial damage in Gallus gallus. Chemosphere 2017 Oct;185:618-627.
100. Hou X, Yang C, Zhang L, Hu T, Sun D, Cao H, Yang F, Guo G, Gong C, Zhang X, Tong A, Li R, Zheng Y. Killing colon cancer cells through PCD pathways by a novel hyaluronic acid-modified shell-core nanoparticle loaded with RIP3 in combination with chloroquine. Biomaterials 2017 Apr;124:195-210.
101. Shen H, Liu C, Zhang D, Yao X, Zhang K, Li H, Chen G. Role for RIP1 in mediating necroptosis in experimental intracerebral hemorrhage model both in vivo and in vitro. Cell Death Dis 2017 Mar 2;8(3):e2641.
102. Li S, Wang Y, Zhao H, He Y, Li J, Jiang G, Xing M. NF-κB-mediated inflammation correlates with calcium overload under arsenic trioxide-induced myocardial damage in Gallus gallus. Chemosphere 2017 Oct;185:618-627.
103. Hou X, Yang C, Zhang L, Hu T, Sun D, Cao H, Yang F, Guo G, Gong C, Zhang X, Tong A, Li R, Zheng Y. Killing colon cancer cells through PCD pathways by a novel hyaluronic acid-modified shell-core nanoparticle loaded with RIP3 in combination with chloroquine. Biomaterials 2017 Apr;124:195-210.
104. Jin C, Liu X, Tan L, Cui Z, Yang X, Zheng Y, Yeung KWK, Chu PK, Wu S Ag/AgBr-loaded mesoporous silica for rapid sterilization and promotion of wound healing. BIOMATER SCI-UK 2018 Jun 25;6(7):1735-1744.
105. Lu YT, Li LZ, Yang YL, Yin X, Liu Q, Zhang L, Liu K, Liu B, Li J, Qi LW Succinate induces aberrant mitochondrial fission in cardiomyocytes through GPR91 signaling. Cell Death Dis 2018 Jun 4;9(6):672.
106. Huang WJ, Wang Y, Liu S, Yang J, Guo SX, Wang L, Wang H, Fan YF. Silencing circular RNA hsa_circ_0000977 suppresses pancreatic ductal adenocarcinoma progression by stimulating miR-874-3p and inhibiting PLK1 expression. Cancer Lett 2018 May 28 422:70-80.
107. Qinghui Meng, Weihua Wu, Tiemin Pei, Junlin Xue, Peng Xiao, Liang Sun, Long Li, Desen Liang miRNA-129/FBW7/NF-κB, a Novel Regulatory Pathway in Inflammatory Bowel Disease MOL THER-NUCL ACIDS 2020 Mar 6;19:731-740.
108. Xiaohua Pan, Jiahong Li, Xing Tu, Chengfei Wu, He Liu, Yang Luo, Xiaoliang Dong, Xiu Li, Li-Long Pan, Jia Sun Lysine-specific demethylase-1 regulates fibroblast activation in pulmonary fibrosis via TGF-β1/Smad3 pathway Pharmacol Res 2020 Feb;152:104592.
109. Kai Kang, Jun-Bo Chuai, Bao-Dong Xie, Jian-Zhong Li, Hui Qu, Hua Wu, Shao-Hong Fang, Jin-Jin Cui, Li-Li Xiu, Jin-Cheng Han, Tian-Hui Cao, Xiao-Ping Leng, Hai Tian, Ren-Ke Li, Shu-Lin Jiang Mesenchymal Stromal Cells from Patients with Cyanotic Congenital Heart Disease are Optimal Candidate for Cardiac Tissue Engineering Biomaterials 2020 Feb;230:119574.
110. Shaofang Zhang, Ying Liu, Si Sun, Junying Wang, Qifeng Li, Ruijuan Yan, Yalong Gao, Haile Liu, Shuangjie Liu, Wenting Hao, Haitao Dai, Changlong Liu, Yuanming Sun, Wei Long, Xiaoyu Mu, Xiao-Dong Zhang Catalytic patch with redox Cr/CeO 2 nanozyme of noninvasive intervention for brain trauma Theranostics 2021 Jan 1;11(6):2806-2821.
111. Imran Rashid Rajput, Summra Yaqoob, Sun Yajing, Edmond Sanganyado, Liu Wenhua Polybrominated diphenyl ethers exert genotoxic effects in pantropic spotted dolphin fibroblast cell lines Environ Pollut 2021 Feb 15;271:116131.
112. Tingting Jin, Lei Xu, Peipei Wang, Xiaobei Hu, Runyuan Zhang, Zhiqi Wu, Wenxin Du, Weijuan Kan, Kun Li, Chang Wang, Yubo Zhou, Jia Li, Tao Liu Discovery and Development of a Potent, Selective, and Orally Bioavailable CHK1 Inhibitor Candidate: 5-((4-((3-Amino-3-methylbutyl)amino)-5-(trifluoromethyl)pyrimidin-2-yl)amino)picolinonitrile J Med Chem 2021 Oct 28;64(20):15069-15090.
113. Fang Geng, Yunxiao Xie, Yi Wang, Jinqiu Wang Depolymerization of chicken egg yolk granules induced by high-intensity ultrasound Food Chem 2021 Aug

30;354:129580.

114. Zhaofu Liao, Yilin Chen, Chuncui Duan, Kuikui Zhu, Ruijin Huang, Hui Zhao, Maik Hintze, Qin Pu, Ziqiang Yuan, Luocheng Lv, Hongyi Chen, Binglin Lai, Shanshan Feng, Xufeng Qi, Dongqing Cai Cardiac telocytes inhibit cardiac microvascular endothelial cell apoptosis through exosomal miRNA-21-5p-targeted cdip1 silencing to improve angiogenesis following myocardial infarction Theranostics 2021 Jan 1;11(1):268-291.
115. Hui Li, Linlin Liu, Zhiwen Cao, Wen Li, Rui Liu, Youwen Chen, Chenxi Li, Yurong Song, Guangzhi Liu, Jinghong Hu, Zhenli Liu, Cheng Lu, Yuanyan Liu Naringenin ameliorates homocysteine induced endothelial damage via the AMPKα/Sirt1 pathway J Adv Res 2021 Jan 23;34:137-147.
116. Xiaoli Liao, Yue Li, Zhenzhu Hu, Ying Lin, Bo Zheng, Jihua Ding Poplar acetylome profiling reveals lysine acetylation dynamics in seasonal bud dormancy release Plant Cell Environ 2021 Jun;44(6):1830-1845.
117. Xiaobao Gong, Hong Tang, Kai Yang PER1 suppresses glycolysis and cell proliferation in oral squamous cell carcinoma via the PER1/RACK1/PI3K signaling complex Cell Death Dis 2021 Mar 15;12(3):276.
118. Jiayan Chen, Liping Lu, Chunlong Zhang, Xiaoming Zhu, Shulin Zhuang Endothelial dysfunction and transcriptome aberration in mouse aortas induced by black phosphorus quantum dots and nanosheets Nanoscale 2021 May 20;13(19):9018-9030.
119. Xiaoyu Mu, Junying Wang, Hua He, Qifeng Li, Bing Yang, Junhui Wang, Haile Liu, Yalong Gao, Lufei Ouyang, Si Sun, Qinjuan Ren, Xinjian Shi, Wenting Hao, Qiaoman Fei, Jiang Yang, Lulin Li, Ryan Vest, Tony Wyss-Coray, Jian Luo, Xiao-Dong Zhang An oligomeric semiconducting nanozyme with ultrafast electron transfers alleviates acute brain injury Sci Adv 2021 Nov 12;7(46):eabk1210.
120. Yan Huang, Yanping Dai, Min Li, Lulu Guo, Chulin Cao, Yuting Huang, Rui Ma, Shengyue Qiu, Xiaoyi Su, Kai Zhong, Yina Huang, Hong Gao, Qian Bu Exposure to cadmium induces neuroinflammation and impairs ciliogenesis in hESC-derived 3D cerebral organoids Sci Total Environ 2021 Nov 25;797:149043.
121. Xunxun Wu, Lian Liu, Qiuling Zheng, Haiping Hao, Hui Ye, Ping Li, Hua Yang Protocatechuic aldehyde protects cardiomycoytes against ischemic injury via regulation of nuclear pyruvate kinase M2 Acta Pharm Sin B 2021 Nov;11(11):3553-3566.
122. Da Zhong, Gan-Zhe Xu, Ju-Zhi Wu, Hua Liu, Ju-Yu Tang, Cheng-Gong Wang Circ-ITCH sponges miR-214 to promote the osteogenic differentiation in osteoporosis via upregulating YAP1 Cell Death Dis 2021 Apr 1;12(4):340.
123. Xiang Wang, Srinivasan Balamurugan, Si-Fen Liu, Chang-Yang Ji, Yu-Hong Liu, Wei-Dong Yang, Liwen Jiang, Hong-Ye Li Hydrolysis of organophosphorus by diatom purple acid phosphatase and sequential regulation of cell metabolism J Exp Bot 2021 Apr 2;72(8):2918-2932.
124. Yanyi Li, Qifan Hu, Weishuo Li, Shijing Liu, Kaiming Li, Xiaoyu Li, Junjie Du, Zexuan Yu, Cong Wang, Can Zhang Simultaneous blockage of contextual TGF-β by cyto-pharmaceuticals to suppress breast cancer metastasis J Control Release 2021 Aug 10;336:40-53.
125. Jingwu Zhu, Jiang Tian, Chao Yang, Junpeng Chen, Lihuang Wu, Mengni Fan, Xiaojun Cai L-Arg-Rich Amphiphilic Dendritic Peptide as a Versatile NO Donor for NO/Photodynamic Synergistic Treatment of Bacterial Infections and Promoting Wound Healing Small 2021 Aug;17(32):e2101495.
126. Yue Wang, Rong Jin, Jiebiao Chen, Jinping Cao, Jianbo Xiao, Xian Li, Chongde Sun Tangeretin maintains antioxidant activity by reducing CUL3 mediated NRF2 ubiquitination Food Chem 2021 Dec 15;365:130470.
127. Xiao-Ling Xu, Nan-Nan Zhang, Gao-Feng Shu, Di Liu, Jing Qi, Fei-Yang Jin, Jian-Song Ji, Yong-Zhong Du A Luminol-Based Self-Illuminating Nanocage as a Reactive Oxygen Species Amplifier to Enhance Deep Tumor Penetration and Synergistic Therapy ACS Nano 2021 Dec 28;15(12):19394-19408.
128. Jing Zhang, Xinru Yu, Chaojun Zhang, Qiong Zhang, Ying Sun, Heqin Zhu, Canming Tang Pectin lyase enhances cotton resistance to Verticillium wilt by inducing cell apoptosis of Verticillium dahliae J Hazard Mater 2021 Feb 15;404(Pt B):124029.
129. Aping Niu, Wan-Ping Bian, Shuang-Long Feng, Shi-Ya Pu, Xing-Yi Wei, Yi-Fan Yang, Li-Yan Song, De-Sheng Pei Role of manganese superoxide dismutase (Mn-SOD) against Cr(III)-induced toxicity in bacteria J Hazard Mater 2021 Feb 5;403:123604.
130. Ye Yuan, Gege Yan, Mingyu He, Hong Lei, Linqiang Li, Yang Wang, Xiaoqi He, Guanghui Li, Quan Wang, Yuelin Gao, Zhezhe Qu, Zhongting Mei, Zhihua Shen, Jiaying Pu, Ao Wang, Wei Zhao, Huiwei Jiang, Weijie Du, Lei Yang ALKBH5 suppresses tumor progression via an m6A-dependent epigenetic silencing of pre-miR-181b-1/YAP signaling axis in osteosarcoma Cell Death Dis 2021 Jan 11;12(1):60.
131. Lun Zhang, Shuiqing Gui, Yinghua Xu, Jiali Zeng, Jian Wang, Qingru Chen, Liqian Su, Ziyan Wang, Rui Deng, Fujiang Chu, Wenbin Liu, Xiaobao Jin, Xuemei Lu Colon tissue-accumulating mesoporous carbon nanoparticles loaded with Musca domestica cecropin for ulcerative colitis therapy Theranostics 2021 Jan 19;11(7):3417-3438.
132. Xing Li, Qian Xia, Meng Mao, Huijuan Zhou, Lu Zheng, Yi Wang, Zhen Zeng, Lulu Yan, Yin Zhao, Jing Shi Annexin-A1 SUMOylation regulates microglial polarization after cerebral ischemia by modulating IKKα stability via selective autophagy Sci Adv 2021 Jan 20;7(4):eabc5539.
133. Haile Liu, Yonghui Li, Si Sun, Qi Xin, Shuhu Liu, Xiaoyu Mu, Xun Yuan, Ke Chen, Hao Wang, Kalman Varga, Wenbo Mi, Jiang Yang, Xiao-Dong Zhang Catalytically potent and selective clusterzymes for modulation of neuroinflammation through single-atom substitutions Nat Commun 2021 Jan 7;12(1):114.
134. Jing-Fei Chen, Kun Liu, Bo Hu, Rong-Rong Li, Wendy Xin, Hao Chen, Fei Wang, Lin Chen, Rui-Xue Li, Shu-Yu Ren, Lan Xiao, Jonah R Chan, Feng Mei Enhancing myelin renewal reverses cognitive dysfunction in a murine model of Alzheimer's disease Neuron 2021 Jul 21;109(14):2292-2307.e5.
135. Yuanyuan Zhang, Shuang Gao, Kaini Liang, Zhaozhao Wu, Xiaojun Yan, Wei Liu, Junyang Li, Bingjie Wu, Yanan Du Exendin-4 gene modification and microscaffold encapsulation promote self-persistence and antidiabetic activity of MSCs Sci Adv 2021 Jul 2;7(27):eabi4379.
136. Xue Kong, Juan Li, Yanru Li, Weili Duan, Qiuchen Qi, Tiantian Wang, Qifeng Yang, Lutao Du, Haiting Mao, Chuanxin Wang A novel long non-coding RNA AC073352.1 promotes metastasis and angiogenesis via interacting with YBX1 in breast cancer Cell Death Dis 2021 Jul 3;12(7):670.
137. Zuotian Wu, Lin Zhou, Limin Sun, Yumeng Xie, Ling Xiao, Huiling Wang, Gaohua Wang Brief postpartum separation from offspring promotes resilience to lipopolysaccharide challenge-induced anxiety and depressive-like behaviors and inhibits neuroinflammation in C57BL/6J dams Brain Behav Immun 2021 Jul;95:190-202.
138. Yu-Peng Wu, Zhi-Bin Ke, Wen-Cai Zheng, Ye-Hui Chen, Jun-Ming Zhu, Fei Lin, Xiao-Dong Li, Shao-Hao Chen, Hai Cai, Qing-Shui Zheng, Yong Wei, Xue-Yi Xue, Ning Xu Kinesin family member 18B regulates the proliferation and invasion of human prostate cancer cells Cell Death Dis 2021 Mar 22;12(4):302.
139. Ting Huang, Xue Li, Fei Wang, Lihong Lu, Wenting Hou, Minmin Zhu, Changhong Miao The CREB/KMT5A complex regulates PTP1B to modulate high glucose-induced endothelial inflammatory factor levels in diabetic nephropathy Cell Death Dis 2021 Mar 29;12(4):333.
140. Jiadong Liu, Mingwei Gao, Jiangping He, Kaixin Wu, Siyuan Lin, Lingmei Jin, Yaping Chen, He Liu, Junjie Shi, Xiwei Wang, Lei Chang, Yingying Lin, Yu-Li Zhao, Xiaofei Zhang, Man Zhang, Guan-Zheng Luo, Guangming Wu, Duanqing Pei, Jie Wang, Xichen Bao, Jiekai Chen The RNA m6A reader YTHDC1 silences retrotransposons and guards ES cell identity Nature 2021 Mar;591(7849):322-326.
141. Qian Hu, Jiaqi Yao, Xiajia Wu, Juan Li, Guixiang Li, Wenfu Tang, Jingping Liu, Meihua Wan Emodin attenuates severe acute pancreatitis-associated acute lung injury by suppressing pancreatic exosome-mediated alveolar macrophage activation Acta Pharm Sin B 2022 Oct;12(10):3986-4003.
142. Caojie Liu, Qiuchan Xiong, Qiwen Li, Weimin Lin, Shuang Jiang, Danting Zhang, Yuan Wang, Xiaobo Duan, Ping Gong, Ning Kang CHD7 regulates bone-fat

balance by suppressing PPAR-γ signaling Nat Commun 2022 Apr 13;13(1):1989.

143. Yan Zou, Xinhong Sun, Qingshan Yang, Meng Zheng, Olga Shimoni, Weimin Ruan, Yibin Wang, Dongya Zhang, Jinlong Yin, Xiangang Huang, Wei Tao, Jong Bae Park, Xing-Jie Liang, Kam W Leong, Bingyang Shi Blood-brain barrier-penetrating single CRISPR-Cas9 nanocapsules for effective and safe glioblastoma gene therapy Sci Adv 2022 Apr 22;8(16):eabm8011.
144. Fu-Hui Xiao, Qin Yu, Zhi-Li Deng, Ke Yang, Yunshuang Ye, Ming-Xia Ge, Dongjing Yan, Hao-Tian Wang, Xiao-Qiong Chen, Li-Qin Yang, Bin-Yu Yang, Rong Lin, Wen Zhang, Xing-Li Yang, Lei Dong, Yonghan He, Jumin Zhou, Wang-Wei Cai, Ji Li, Qing-Peng Kong ETS1 acts as a regulator of human healthy aging via decreasing ribosomal activity Sci Adv 2022 Apr 29;8(17):eabf2017.
145. Shaofang Zhang, Yonghui Li, Si Sun, Ling Liu, Xiaoyu Mu, Shuhu Liu, Menglu Jiao, Xinzhu Chen, Ke Chen, Huizhen Ma, Tuo Li, Xiaoyu Liu, Hao Wang, Jianning Zhang, Jiang Yang, Xiao-Dong Zhang Single-atom nanozymes catalytically surpassing naturally occurring enzymes as sustained stitching for brain trauma Nat Commun 2022 Aug 12;13(1):4744.
146. Lining Lu, Xiaoguo Zhai, Xiaolong Li, Shuansuo Wang, Lijun Zhang, Luyang Wang, Xi Jin, Lujun Liang, Zhiheng Deng, Zichen Li, Yanfeng Wang, Xiangdong Fu, Honggang Hu, Jiawei Wang, Ziqing Mei, Zhengguo He, Feng Wang Met1-specific motifs conserved in OTUB subfamily of green plants enable rice OTUB1 to hydrolyse Met1 ubiquitin chains Nat Commun 2022 Aug 9;13(1):4672.
147. Kun Wang, Muyun Wang, Ximing Liao, Shaoyong Gao, Jing Hua, Xiaodong Wu, Qian Guo, Wujian Xu, Jiaxing Sun, Yanan He, Qiang Li, Wei Gao Locally organised and activated Fth1hi neutrophils aggravate inflammation of acute lung injury in an IL-10-dependent manner Nat Commun 2022 Dec 13;13(1):7703.
148. Huanqing Gao, Liang Zhou, Yiming Zhong, Zhen Ding, Sixiong Lin, Xiaoting Hou, Xiaoqian Zhou, Jie Shao, Fan Yang, Xuenong Zou, Huiling Cao, Guozhi Xiao Kindlin-2 haploinsufficiency protects against fatty liver by targeting Foxo1 in mice Nat Commun 2022 Feb 23;13(1):1025.
149. Xiaoxue Lu, Qiaolin Xu, Yanan Tong, Zhujun Zhang, Guodong Dun, Yuyang Feng, Jie Tang, Dan Han, Yilan Mao, Ling Deng, Xiaoyi He, Qian Li, Yang Xiang, FengChao Wang, Dongzhu Zeng, Bin Tang, Xuhu Mao Long non-coding RNA EVADR induced by Fusobacterium nucleatum infection promotes colorectal cancer metastasis Cell Rep 2022 Jul 19;40(3):111127.
150. Naihao Ye, Wentao Han, Andrew Toseland, Yitao Wang, Xiao Fan, Dong Xu, Cock van Oosterhout, Sea of Change Consortium, Igor V Grigoriev, Alessandro Tagliabue, Jian Zhang, Yan Zhang, Jian Ma, Huan Qiu, Youxun Li, Xiaowen Zhang, Thomas Mock, Shazia N Aslam, Kerrie Barry, Bank Beszteri, Corina Brussaard, Alicia Clum, Alex Copeland, Chris Daum, Anthony Duncan, Emiley Eloe-Fadrosh, Allison Fong, Brian Foster, Bryce Foster, Michael Ginzburg, Marcel Huntemann, Natalia N Ivanova, Nikos C Kyrpides, Kara Martin, Vincent Moulton, Supratim Mukherjee, Krishnaveni Palaniappan, T B K Reddy, Simon Roux, Katrin Schmidt, Jan Strauss, Klaas Timmermans, Susannah G Tringe, Graham J C Underwood, Klaus U Valentin, Willem H van de Poll, Neha Varghese The role of zinc in the adaptive evolution of polar phytoplankton Nat Ecol Evol 2022 Jul;6(7):965-978.
151. Zizhi Tang, Ming Zeng, Xiaojun Wang, Chang Guo, Peng Yue, Xiaohu Zhang, Huiqiang Lou, Jun Chen, Dezhi Mu, Daochun Kong, Antony M Carr, Cong Liu Synthetic lethality between TP53 and ENDOD1 Nat Commun 2022 May 23;13(1):2861.
152. Yi Zhou, Peng Ke, Xiaoyan Bao, Honghui Wu, Yiyi Xia, Zhentao Zhang, Haiqing Zhong, Qi Dai, Linjie Wu, Tiantian Wang, Mengting Lin, Yaosheng Li, Xinchi Jiang, Qiyao Yang, Yiying Lu, Xincheng Zhong, Min Han, Jianqing Gao Peptide nano-blanket impedes fibroblasts activation and subsequent formation of pre-metastatic niche Nat Commun 2022 May 25;13(1):2906.
153. Jiang Wang, Jing Zhao, Cong Yan, Cong Xi, Chenglin Wu, Jingxiang Zhao, Fengwei Li, Yanhua Ding, Rui Zhang, Shankang Qi, Xingjun Li, Chao Liu, Wanting Hou, Hong Chen, Yiping Wang, Dalei Wu, Kaixian Chen, Hualiang Jiang, He Huang, Hong Liu Identification and evaluation of a lipid-lowering small compound in preclinical models and in a Phase I trial Cell Metab 2022 May 3;34(5):667-680.e6.
154. Bingke Ma, Xingyue Shan, Juehua Yu, Tailin Zhu, Ren Li, Hui Lv, Haidi Cheng, Tiantian Zhang, Lihua Wang, Feiyang Wei, Bo Meng, Xiaobing Yuan, Bing Mei, Xiao-Yong Zhang, Wei-Guang Li, Fei Li Social deficits via dysregulated Rac1-dependent excitability control of prefrontal cortical neurons and increased GABA/glutamate ratios Cell Rep 2022 Nov 29;41(9):111722.
155. Mei Luo, Lin Ye, Ruimin Chang, Youqiong Ye, Zhao Zhang, Chunjie Liu, Shengli Li, Ying Jing, Hang Ruan, Guanxiong Zhang, Yi He, Yaoming Liu, Yu Xue, Xiang Chen, An-Yuan Guo, Hong Liu, Leng Han Multi-omics characterization of autophagy-related molecular features for therapeutic targeting of autophagy Nat Commun 2022 Oct 26;13(1):6345.
156. Dan Qin, Shenghui Liu, Yuanyuan Lu, Yi Yan, Jing Zhang, Shiyao Cao, Mi Chen, Ning Chen, Wendong Huang, Liqiang Wang, Xiangmei Chen, Lisheng Zhang Lgr5 + cell fate regulation by coordination of metabolic nuclear receptors during liver repair Theranostics 2022 Aug 15;12(14):6130-6142.
157. Yansheng Zhai, Xiaoyan Huang, Keren Zhang, Yuchen Huang, Yanlong Jiang, Jingwei Cui, Zhe Zhang, Cookson K C Chiu, Weiye Zhong, Gang Li Spatiotemporal-resolved protein networks profiling with photoactivation dependent proximity labeling Nat Commun 2022 Aug 20;13(1):4906.
158. Lan Zhou, Shupei Tang, Fang Li, Yonghui Wu, Sirui Li, Liwei Cui, Jing Luo, Lu Yang, Zhicheng Ren, Ji Zhang, Denglu Zhou, Jun Jiang, Xiaochao Yang, Xinyuan Zhou, Yuzhang Wu Ceria nanoparticles prophylactic used for renal ischemia-reperfusion injury treatment by attenuating oxidative stress and inflammatory response Biomaterials 2022 Aug:287:121686.
159. Wei Wu, Haoyu Guo, Doudou Jing, Zhenhao Zhang, Zhicai Zhang, Feifei Pu, Wenbo Yang, Xin Jin, Xin Huang, Zengwu Shao Targeted Delivery of PD-L1-Derived Phosphorylation-Mimicking Peptides by Engineered Biomimetic Nanovesicles to Enhance Osteosarcoma Treatment Adv Healthc Mater 2022 Dec;11(23):e2200955.
160. Jilong Zhou, Hainan He, Jing-Jing Zhang, Xin Liu, Wang Yao, Chengyu Li, Tian Xu, Shu-Yuan Yin, Dan-Ya Wu, Cheng-Li Dou, Qiao Li, Jiani Xiang, Wen-Jing Xiong, Li-Yan Wang, Jun-Ming Tang, Zhouyiyuan Xue, Xia Zhang, Yi-Liang Miao ATG7-mediated autophagy facilitates embryonic stem cell exit from naive pluripotency and marks commitment to differentiation Autophagy 2022 Dec;18(12):2946-2968.
161. Dan-Lin Zheng, Qing-Rui Wu, Peng Zeng, Sui-Min Li, Yong-Jiang Cai, Shu-Zhen Chen, Xue-Shan Luo, Su-Juan Kuang, Fang Rao, Ying-Yu Lai, Meng-Yuan Zhou, Fei-Long Wu, Hui Yang, Chun-Yu Deng Advanced glycation end products induce senescence of atrial myocytes and increase susceptibility of atrial fibrillation in diabetic mice Aging Cell 2022 Dec;21(12):e13734.
162. Ke Li, Chuanchuan Lin, Menghuan Li, Kun Xu, Ye He, Yulan Mao, Lu Lu, Wenbo Geng, Xuemin Li, Zhong Luo, Kaiyong Cai Multienzyme-like Reactivity Cooperatively Impairs Glutathione Peroxidase 4 and Ferroptosis Suppressor Protein 1 Pathways in Triple-Negative Breast Cancer for Sensitized Ferroptosis Therapy ACS Nano 2022 Feb 22;16(2):2381-2398.
163. Ping Liu, Xiaoji Cong, Shengjie Liao, Xinglong Jia, Xiaomin Wang, Wei Dai, Linhui Zhai, Lei Zhao, Jing Ji, Duan Ni, Zhiwei Liu, Yulu Chen, Lulu Pan, Wei Liu, Jian Zhang, Min Huang, Bin Liu, Minjia Tan Global identification of phospho-dependent SCF substrates reveals a FBXO22 phosphodegron and an ERK-FBXO22-BAG3 axis in tumorigenesis Cell Death Differ 2022 Jan;29(1):1-13.
164. Chunyue Liu, Zixing Fu, Shanshan Wu, Xiaosong Wang, Shengrong Zhang, Chu Chu, Yuan Hong, Wenbo Wu, Shengqi Chen, Yueqing Jiang, Yang Wu, Yongbo Song, Yan Liu, Xing Guo Mitochondrial HSF1 triggers mitochondrial dysfunction and neurodegeneration in Huntington's disease EMBO Mol Med 2022 Jul 7;14(7):e15851.
165. Changwei Li, Minglong Qiu, Leilei Chang, Jin Qi, Lianfang Zhang, Bernhard Ryffel, Lianfu Deng The osteoprotective role of USP26 in coordinating bone formation and resorption Cell Death Differ 2022 Jun;29(6):1123-1136.
166. Lai Wang, Lijun Zhu, Zuguo Zheng, Lingchang Meng, Hanling Liu, Keke Wang, Jun Chen, Ping Li, Hua Yang Mevalonate pathway orchestrates insulin signaling via RAB14 geranylgeranylation-mediated phosphorylation of AKT to regulate hepatic glucose metabolism Metabolism 2022 Mar:128:155120.

167. Yingchun Wang, Yuzhen Wang, Lu Ding, Xiaolei Ren, Bo Wang, Liyuan Wang, Songbo Zhao, Xuetian Yue, Zhuanchang Wu, Chunyang Li, Xiaohong Liang, Chunhong Ma, Lifen Gao Tim-4 reprograms cholesterol metabolism to suppress antiviral innate immunity by disturbing the Insig1-SCAP interaction in macrophages Cell Rep 2022 Nov 29;41(9):111738.
168. Haoyu Guo, Lutong Wang, Wei Wu, Mingke Guo, Lingkai Yang, Zhenhao Zhang, Li Cao, Feifei Pu, Xin Huang, Zengwu Shao Engineered biomimetic nanoreactor for synergistic photodynamic-chemotherapy against hypoxic tumor J Control Release 2022 Nov:351:151-163.
169. Wei Zhou, Wen-Hui Wu, Zi-Lin Si, Hui-Ling Liu, Hanyu Wang, Hong Jiang, Ya-Fang Liu, Raphael N Alolga, Cheng Chen, Shi-Jia Liu, Xue-Yan Bian, Jin-Jun Shan, Jing Li, Ning-Hua Tan, Zhi-Hao Zhang The gut microbe Bacteroides fragilis ameliorates renal fibrosis in mice Nat Commun 2022 Oct 14;13(1):6081.
170. Xiuqin Jia, Ming Xin, Juanjuan Xu, Xindong Xiang, Xuan Li, Yuhan Jiao, Lulin Wang, Jingjing Jiang, Feng Pang, Xianzhen Zhang, Jian Zhang Inhibition of autophagy potentiates the cytotoxicity of the irreversible FGFR1-4 inhibitor FIIN-2 on lung adenocarcinoma Cell Death Dis 2022 Aug 30;13(8):750.
171. Rongchen Shi, Kun Zhao, Teng Wang, Jing Yuan, Dapeng Zhang, Wei Xiang, Jin Qian, Na Luo, Yong Zhou, Bo Tang, Chuan Li, Hongming Miao 5-aza-2'-deoxycytidine potentiates anti-tumor immunity in colorectal peritoneal metastasis by modulating ABC A9-mediated cholesterol accumulation in macrophages Theranostics 2022 Jan 1;12(2):875-890.
172. Haiyang Zhao, Tingting Zhao, Jihong Yang, Qianqian Huang, Hua Wu, Yueyun Pan, Hui Wang, Yun Qian Epimedium protects against dyszoospermia in mice with Pex3 knockout by exerting antioxidant effects and regulating the expression level of P16 Cell Death Dis 2022 Jan 20;13(1):69.
173. Jin Qiu, Qianqian Fan, Sainan Xu, Dongmei Wang, Juntong Chen, Sainan Wang, Tianhui Hu, Xinran Ma, Yiyun Cheng, Lingyan Xu A fluorinated peptide with high serum- and lipid-tolerence for the delivery of siRNA drugs to treat obesity and metabolic dysfunction Biomaterials 2022 Jun:285:121541.
174. Yan-Ran Sheng, Wen-Ting Hu, Hui-Hui Shen, Chun-Yan Wei, Yu-Kai Liu, Xiao-Qian Ma, Ming-Qing Li, Xiao-Yong Zhu An imbalance of the IL-33/ST2-AXL-efferocytosis axis induces pregnancy loss through metabolic reprogramming of decidual macrophages Cell Mol Life Sci 2022 Mar 4;79(3):173.
175. Fengfeng Li, Man Jiang, Minghui Ma, Xuyang Chen, Yidan Zhang, Yixin Zhang, Yuanyuan Yu, Yunfeng Cui, Jiahui Chen, Hui Zhao, Zhijie Sun, Deli Dong Anthelmintics nitazoxanide protects against experimental hyperlipidemia and hepatic steatosis in hamsters and mice Acta Pharm Sin B 2022 Mar;12(3):1322-1338.
176. Yongsheng Yu, Xiaochun Xue, Wendong Tang, Li Su, Lei Zhang, Yuefan Zhang Cytosolic DNA–Mediated STING-Dependent Inflammation Contributes to the Progression of Psoriasis J Invest Dermatol 2022 Mar;142(3 Pt B):898-906.e4.
177. Yue Zhuo, Shujun Li, Wei Hu, Yu Zhang, Yufan Shi, Faxue Zhang, Jian Zhang, Juan Wang, Meijuan Liao, Jiahao Chen, Huiling Qian, Dejia Li, Chengcao Sun Targeting SNORA38B attenuates tumorigenesis and sensitizes immune checkpoint blockade in non-small cell lung cancer by remodeling the tumor microenvironment via regulation of GAB2/AKT/mTOR signaling p J Immunother Cancer 2022 May;10(5):e004113.
178. Min-Hua Cui, Lei Chen, Qian Zhang, Lan-Ying Liu, Hui Pan, He Liu, Ai-Jie Wang Understanding the effects of sludge characteristics on the biosorption of triclosan Sci Total Environ 2022 Oct 10:842:156665.
179. Fangwei Yang, Yixuan Li, Yunfei Xie, Weirong Yao, Fazheng Ren Diethyl phosphate disrupts hypothalamus-pituitary-adrenal axis endocrine hormones via nuclear receptors GR and Nur77: Integration of evidences from in vivo, in vitro and in silico approaches Sci Total Environ 2022 Oct 20:844:157015.
180. Kou Liu, Xiang Gao, Chengyang Hu, Yanchao Gui, Siyu Gui, Qinyu Ni, Liming Tao, Zhengxuan Jiang Capsaicin ameliorates diabetic retinopathy by inhibiting poldip2-induced oxidative stress Redox Biol 2022 Oct:56:102460.

注：更多使用本产品的文献请参考产品网页。

Version 2024.03.12