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BCA蛋白浓度测定试剂盒

产品编号	产品名称	包装
P0011	BCA蛋白浓度测定试剂盒	5000次

产品简介:

- BCA蛋白浓度测定试剂盒(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。
- 灵敏度高, 检测浓度下限达到25 μ g/ml, 最小检测蛋白量达到0.5 μ g, 待测样品体积为1-20 μ l。
- 在50-2000 μ g/ml浓度范围内有较好的线性关系。
- 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对样品中各种物质的详细的兼容性, 请参见碧云天如下网页:
<http://www.beyotime.com/Compatibility Chart For BCA Kit.pdf>
- 每个试剂盒可以检测5000个样品。

包装清单:

产品编号	产品名称	包装
P0011-1	BCA试剂 A	500ml \times 2
P0011-2	BCA试剂 B	30ml
P0011-3	蛋白标准(BSA)	30mg \times 2
P0011-4	蛋白标准配制液	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 $^{\circ}$ 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

- 取1.2ml蛋白标准配制液加入到一管蛋白标准(30mg BSA)中, 充分溶解后配制成为**25mg/ml**的蛋白标准溶液。配制后可立即使用, 也可以-20 $^{\circ}$ C长期保存。
- 取适量25mg/ml蛋白标准, 稀释至终浓度为**0.5mg/ml**。例如取20 μ l 25mg/ml蛋白标准, 加入980 μ l稀释液即可配制成为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 $^{\circ}$ C长期保存。

2. BCA工作液配制

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100 μ l BCA试剂B, 混匀, 配制成为5.1ml BCA工作液。BCA工作液室温24小时内稳定。

3. 蛋白浓度测定

- 将**标准品**按0、1、2、4、8、12、16、20 μ l加到96孔板的标准品孔中, 加标准品稀释液**补足到20 μ l**, 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20 μ l，需加标准品稀释液补足到20 μ l。请注意记录样品体积。

c. 各孔加入200 μ l BCA工作液，37 $^{\circ}$ C放置20-30分钟。

注：也可以室温放置2小时，或60 $^{\circ}$ 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。并且显色反应会因为温度升高而加快。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之间的其他波长的吸光度。

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. β 2-integrins mediate a novel form of chemoresistance 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;224:229-241.
3. Zhang Z, Ke M, Qu Q, Peijnenburg WJGM, Lu T, Zhang Q, Ye Y, Xu P, Du B, Sun L, Qian H Impact of copper nanoparticles and ionic copper exposure on wheat (Triticum aestivum L.) root morphology and antioxidant response. Environ Pollut 2018 Aug;239:689-697.
4. Zhao X, Wu X, Qian M, Song Y, Wu D, Zhang W Knockdown of TGF- β 1 expression in human umbilical cord mesenchymal stem cells reverts their exosome-mediated EMT promoting effect on lung cancer cells. Cancer Lett 2018 Aug 1;428:34-44.
5. 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.
6. 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.
7. Luo J, Xu Q, Jiang B, Zhang R, Jia X, Li X, Wang L, Guo C, Wu N, Shi D Selectivity, cell permeability and oral availability studies of novel bromophenol derivative HPN as protein tyrosine phosphatase 1B inhibitor. BRIT J PHARMACOL 2018 Jan;175(1):140-153.
8. 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.
9. Zhang X, Li J, Wang X, Wang Y, Hang R, Huang X, Tang B, Chu PK Effects of copper nanoparticles in porous TiO₂ coatings on bacterial resistance and cytocompatibility of osteoblasts and endothelial cells. MAT SCI ENG C-MATER 2018 Jan 1;82:110-120.
10. 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.
11. Zhao L, Tao X, Qi Y, Xu L, Yin L, Peng J Protective effect of dioscin against doxorubicin-induced cardiotoxicity via adjusting microRNA-140-5p-mediated myocardial oxidative stress. Redox Biol 2018 Jun;16:189-198.
12. 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.
13. 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.
14. Yao H, Tao X, Xu L, Qi Y, Yin L, Han X, Xu Y, Zheng L, Peng J Dioscin alleviates non-alcoholic fatty liver disease through adjusting lipid metabolism via SIRT1/AMPK signaling pathway. Pharmacol Res 2018 May;131:51-60.
15. 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):1998-2005.
16. Hou L, Gan F, Zhou X, Zhou Y, Qian G, Liu Z, Huang K Immunotoxicity of ochratoxin A and aflatoxin B1 in combination is associated with the nuclear factor kappa B signaling pathway in 3D4/21 cells. Chemosphere 2018 May;199:718-727.
17. 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.

18. Ma K, Hu M, Qi Y, Qiu L, Jin Y, Yu J, Li B. Structure-transfection activity relationships with glucocorticoid-polyethyl-eneimine conjugate nuclear gene delivery systems. *Biomaterials* 2009 Aug;30(22):3780-9.
19. Fan L, Lin C, Zhuo S, Chen L, Liu N, Luo Y, Fang J, Huang Z, Lin Y, Chen J. Transplantation with survivin-engineered mesenchymal stem cells results in better prognosis in a rat model of myocardial infarction. *Eur J Heart Fail* 2009;11(11):1023-30.
20. 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.
21. 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.
22. 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.
23. 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.
24. 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.
25. Zhang YS, He L, Liu B, Li NS, Luo XJ, Hu CP, Ma QL, Zhang GG, Li YJ, Peng J. A novel pathway of NADPH oxidase/vascular peroxidase 1 in mediating oxidative injury following ischemia-reperfusion. *Basic Res Cardiol* 2012;107(3):266.
26. Zhu XB, Wang YB, Chen O, Zhang DQ, Zhang ZH, Cao AH, Huang SY, Sun RP. Characterization of the expression of macrophage inflammatory protein-1 α (MIP-1 α) and chemokine receptor CCR5 after kainic acid-induced status epilepticus (SE) in juvenile rats. *NEUROPATH APPL NEURO* 2012 Oct;38(6):602-16.
27. Liu M, Zhou G, Song W, Li P, Liu H, Niu X, Fan Y. Effect of nano-hydroxyapatite on the axonal guidance growth of rat cortical neurons. *Nanoscale* 2012 May 21;4(10):3201-7.
28. Yan W, Zhang H, Liu P, Wang H, Liu J, Gao C, Liu Y, Lian K, Yang L, Sun L, Guo Y, Zhang L, Dong L, Lau WB, Gao E, Gao F, Xiong L, Wang H, Qu Y, Tao L. Impaired mitochondrial biogenesis due to dysfunctional adiponectin-AMPK-PGC-1 α signaling contributing to increased vulnerability in diabetic heart. *Basic Res Cardiol* 2013 May;108(3):329.
29. Li X, Wang X, Han C, Wang X, Xing G, Zhou L, Li G, Niu Y. Astragaloside IV suppresses collagen production of activated hepatic stellate cells via oxidative stress-mediated p38 MAPK pathway. *FREE RADICAL BIO MED* 2013 Jul;60:168-76.
30. Jing J, Liu H, Chen H, Hu S, Xiao K, Ma X. Acute effect of copper and cadmium exposure on the expression of heat shock protein 70 in the Cyprinidae fish *Tanichthys albonubes*. *Chemosphere* 2013 May;91(8):1113-22.
31. Li LL, Wang H. Enzyme-Coated Mesoporous Silica Nanoparticles as Efficient Antibacterial Agents In Vivo. *Adv Healthc Mater* 2013 Oct;2(10):1351-60.
32. Tang Z, Wu M, Li Y, Zheng X, Liu H, Cheng X, Xu L, Wang G, Hao H. Absolute quantification of NAD(P)H:quinone oxidoreductase 1 in human tumor cell lines and tissues by liquid chromatography-mass spectrometry/mass spectrometry using both isotopic and non-isotopic internal standards. *Anal Chim Acta* 2013 Apr 15;772:59-67.
33. Huo K, Zhang X, Wang H, Zhao L, Liu X, Chu PK. Osteogenic activity and antibacterial effects on titanium surfaces modified with Zn-incorporated nanotube arrays. *Biomaterials* 2013 Apr;34(13):3467-78.
34. Wu W, Yang J, Feng X, Wang H, Ye S, Yang P, Tan W, Wei G, Zhou Y. MicroRNA-32 (miR-32) regulates phosphatase and tensin homologue (PTEN) expression and promotes growth, migration, and invasion in colorectal carcinoma cells. *Mol Cancer* 2013 Apr 23;12:30.
35. Chen O, Ye Z, Cao Z, Manaenko A, Ning K, Zhai X, Zhang R, Zhang T, Chen X, Liu W, Sun X. Methane attenuates myocardial ischemia injury in rats through anti-oxidative, anti-apoptotic and anti-inflammatory actions. *FREE RADICAL BIO MED* 2015 Nov 14;90:1-11.
36. Lv QY, Wan B, Guo LH, Zhao L, Yang Y. In vitro immune toxicity of polybrominated diphenyl ethers on murine peritoneal macrophages: apoptosis and immune cell dysfunction. *Chemosphere* 2015 Feb;120:621-30.
37. Ailijiang N, Chang J, Liang P, Li P, Wu Q, Zhang X, Huang X. Electrical stimulation on biodegradation of phenol and responses of microbial communities in conductive carriers supported biofilms of the bioelectrochemical reactor. *BIORESOURTE TECHNOL* 2015 Nov 17;201:1-7.
38. 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.
39. Wang T, Hou J, Su C, Zhao L, Shi Y. Hyaluronic acid-coated chitosan nanoparticles induce ROS-mediated tumor cell apoptosis and enhance antitumor efficiency by targeted drug delivery via CD44. *J NANOBIOTECHNOL* 2017 Jan 10;15(1):7.
40. Liu S, Fei W, Shi Q, Li Q, Kuang Y, Wang C, He C, Hu X. CHAC2, downregulated in gastric and colorectal cancers, acted as a tumor suppressor inducing apoptosis and autophagy through unfolded protein response. *Cell Death Dis* 2017 Aug 24;8(8):e3009.
41. Liu X, Zhou L, Chen X, Liu T, Pan G, Cui W, Li M, Luo ZP, Pei M, Yang H, Gong Y, He F. Culturing on decellularized extracellular matrix enhances antioxidant properties of human umbilical cord-derived mesenchymal stem cells. *MAT SCI ENG C-MATER* 2016 Apr 1;61:437-48.
42. Miao L, Shen X, Whiteman M, Xin H, Shen Y, Xin X, Moore PK, Zhu YZ. Hydrogen Sulfide Mitigates Myocardial Infarction via Promotion of Mitochondrial Biogenesis-Dependent M2 Polarization of Macrophages. *ANTIOXID REDOX SIGN* 2016 Aug 10;25(5):268-81.
43. Gan F, Zhou Y, Hou L, Qian G, Chen X, Huang K. Ochratoxin A induces nephrotoxicity and immunotoxicity through different MAPK signaling pathways in PK15 cells and porcine primary splenocytes. *Chemosphere* 2017 Sep;182:630-637.
44. Cao Z, Fang Y, Lu Y, Tan D, Du C, Li Y, Ma Q, Yu J, Chen M, Zhou C, Pei L, Zhang L, Ran H, He M, Yu Z, Zhou Z. Melatonin alleviates cadmium-induced liver injury by inhibiting the TXNIP-NLRP3 inflammasome. *J Pineal Res* 2017 Apr;62(3).
45. Li Y, Pan K, Chen L, Ning JL, Li X, Yang T, Terrando N, Gu J, Tao G. Deferoxamine regulates neuroinflammation and iron homeostasis in a mouse model of postoperative cognitive dysfunction. *J NEUROINFLAMM* 2016 Oct 12;13(1):268.
46. Liu D, Li Y, Luo G, Xiao X, Tao D, Wu X, Wang M, Huang C, Wang L, Zeng F, Jiang G. LncRNA SPRY4-IT1 sponges miR-101-3p to promote proliferation and metastasis of bladder cancer cells through up-regulating EZH2. *Cancer Lett* 2016 Dec 18;388:281-291.
47. Chen Y, Gao A, Bai L, Wang Y, Wang X, Zhang X, Huang X, Hang R, Tang B, Chu PK. Antibacterial, osteogenic, and angiogenic activities of SrTiO₃ nanotubes embedded with Ag₂O nanoparticles. *MAT SCI ENG C-MATER* 2017 Jun 1;75:1049-1058.
48. Chen W, Shen X, Hu Y, Xu K, Ran Q, Yu Y, Dai L, Yuan Z, Huang L, Shen T, Cai K. Surface functionalization of titanium implants with chitosan-catechol conjugate for suppression of ROS-induced cells damage and improvement of osteogenesis. *Biomaterials* 2017 Jan;114:82-96.
49. Liu H, Huang X, Yu H, Yang X, Zhang X, Hang R, Tang B. A cytocompatible micro/nano-textured surface with Si-doped titania mesoporous arrays fabricated by a one-step anodization. *MAT SCI ENG C-MATER* 2017 Apr 1;73:120-129.
50. Huang T, Yin L, Wu J, Gu JJ, Wu JZ, Chen D, Yu HL, Ding K, Zhang N, Du MY, Qian LX, Lu ZW, He X. MicroRNA-19b-3p regulates nasopharyngeal carcinoma radiosensitivity by targeting TNFAIP3/NF- κ B axis. *J EXP CLIN CANC RES* 2016 Dec 5;35(1):188.
51. Liu Y, Shi F, Bo L, Zhi W, Weng J, Qu S. A novel alginate-encapsulated system to study biological response to critical-sized wear particles of UHMWPE loaded with alendronate sodium. *MAT SCI ENG C-MATER* 2017 Oct 1;79:679-686.
52. Liu W, Zhang B, Chen G, Wu W, Zhou L, Shi Y, Zeng Q, Li Y, Sun Y, Deng X, Wang F. Targeting miR-21 with Sophocarpine Inhibits Tumor Progression and Reverses

- Epithelial-Mesenchymal Transition in Head and Neck Cancer. *Mol Ther* 2017 Sep 6;25(9):2129-2139.
53. Wang Y, Zhou Q, Wu B, Zhou H, Zhang X, Jiang W, Wang L, Wang A. Propofol induces excessive vasodilation of aortic rings by inhibiting protein kinase C β 2 and θ in spontaneously hypertensive rats. *BRIT J PHARMACOL* 2017 Jul;174(13):1984-2000.
 54. Zhao Y, Tan K, Zhou Y, Ye Z, Tan WS . A combinatorial variation in surface chemistry and pore size of three-dimensional porous poly(ϵ -caprolactone) scaffolds modulates the behaviors of mesenchymal stem cells. *MAT SCI ENG C-MATER* 2016 Feb;59:193-202.
 55. Peng YY, He YH, Chen C, Xu T, Li L, Ni MM, Meng XM, Huang C, Li J4. NLRC5 regulates cell proliferation, migration and invasion in hepatocellular carcinoma by targeting the Wnt/ β -catenin signaling pathway. *Cancer Lett* 2016 Jun 28;376(1):10-21.
 56. Cui R, Guan Y, Sun C, Chen L, Bao Y, Li G, Qiu B, Meng X, Pang C, Wang Y . A tumor-suppressive microRNA, miR-504, inhibits cell proliferation and promotes apoptosis by targetingFOXP1 in human glioma. *Cancer Lett* 2016 Apr 28;374(1):1-11.
 57. Lv H, Liu Q, Wen Z, Feng H, Deng X, Ci X. Xanthohumol ameliorates lipopolysaccharide (LPS)-induced acute lung injury via induction of AMPK/GSK3 β -Nrf2 signal axis. *Redox Biol* 2017 Aug;12:311-324.
 58. Yan J, Lai CH, Lung SC, Wang WC, Huang CC, Chen GW, Suo G, Choug CT, Lin CH. Carbon black aggregates cause endothelial dysfunction by activating ROCK. *J Hazard Mater* 2017 Sep 15;338:66-75.
 59. Liu Z, Gan L, Wu T, Feng F, Luo D, Gu H, Liu S, Sun C . Adiponectin reduces ER stress-induced apoptosis through PPAR α transcriptional regulation *Cell Death Dis* 2016 Nov 24;7(11):e2487.
 60. Song Y, Yuan L, Wang Y, Chen M, Deng J, Lv Q, Sui T, Li Z, Lai L . Efficient dual sgRNA-directed large gene deletion in rabbit with CRISPR/Cas9 system. *Cell Mol Life Sci* 2016 Aug;73(15):2959-68.
 61. Lu Y, Xu S, Chen H, He M, Deng Y, Cao Z, Pi H, Chen C, Li M, Ma Q, Gao P, Ji Y, Zhang L, Yu Z, Zhou Z . CdSe/ZnS quantum dots induce hepatocyte pyroptosis and liver inflammation via NLRP3 inflammasome activation. *Biomaterials* 2016 Jun;90:27-39.
 62. Zhao L, Liu S, Xu J, Li W, Duan G, Wang H, Yang H, Yang Z, Zhou R. A new molecular mechanism underlying the EGCG-mediated autophagic modulation of AFP in HepG2 cells. *Cell Death Dis* 2017 Nov 2;8(11):e3160.
 63. Tang Y, Cui Y, Li Z, Jiao Z, Zhang Y, He Y, Chen G, Zhou Q, Wang W, Zhou X, Luo J, Zhang S. Radiation-induced miR-208a increases the proliferation and radioresistance by targeting p21 in human lung cancer cells. *J EXP CLIN CANC RES* 2016 Jan 12;35:7.
 64. Liu C, Wu H, Li Y, Shen L, Yu R, Yin H, Sun T, Sun C, Zhou Y, Du Z. SALL4 suppresses PTEN expression to promote glioma cell proliferation via PI3K/AKT signaling pathway. *NEURO-ONCOLOGY* 2017 Nov;135(2):263-272.
 65. Teng H, Wang P, Xue Y, Liu X, Ma J, Cai H, Xi Z, Li Z, Liu Y. Role of HCP5-miR-139-RUNX1 Feedback Loop in Regulating Malignant Behavior of Glioma Cells. *Mol Ther* 2016 Oct;24(10):1806-1822.
 66. Yan J, Lai CH, Lung SC, Chen C, Wang WC, Huang PI, Lin CH. Industrial PM2.5 cause pulmonary adverse effect through RhoA/ROCK pathway. *Sci Total Environ* 2017 Dec 1;599-600:1658-1666.
 67. Li W, Zheng M, Wu S, Gao S, Yang M, Li Z, Min Q, Sun W, Chen L, Xiang G, Li H. Benserazide, a dopadecarboxylase inhibitor, suppresses tumor growth by targeting hexokinase 2. *J EXP CLIN CANC RES* 2017 Apr 20;36(1):58.
 68. Wang Q, Zhou JL, Wang H, Ju Q, Ding Z, Zhou XL, Ge X, Shi QM, Pan C, Zhang JP, Zhang MR, Yu HM, Xu LC. Inhibition effect of cypermethrin mediated by co-regulators SRC-1 and SMRT in interleukin-6-induced androgen receptor activation. *Chemosphere* 2016 Sep;158:24-9.
 69. Sun Y, Zong L, Gao Z, Zhu S, Tong J, Cao Y. Mitochondrial DNA damage and oxidative damage in HL-60 cells exposed to 900MHz radiofrequency fields. *MUTAT RES-REV MUTAT* 2017 Mar;797-799:7-14.
 70. Chen W, Su H, Xu Y, Bao T, Zheng X. Protective effect of wild raspberry (*Rubus hirsutus* Thunb) extract against acrylamide-induced oxidativdamage is potentiated after simulated gastrointestinal digestion. *Food Chem* 2016 Apr 1;196:943-52.
 71. Chen D, Xia D, , Pan Z, Xu D, Zhou Y, Wu Y, Cai N, Tang Q, Wang C, Yan M, Zhang JJ, Zhou K, Wang Q, Feng Y, Wang X, Xu H, Zhang X, , Tian N. Metformin protects against apoptosis and senescence in nucleus pulposus cells and ameliorates discdegeneration in vivo. *Cell Death Dis* 2016 Oct 27;7(10):e2441.
 72. Tang W, Shen M, Xie J, Liu D, Du M, Lin L, Gao H, Hamaker BR, Xie M. Physicochemical characterization, antioxidant activity of polysaccharides from *Mesona chinensis* Benth and their protective effect on injured NCTC-1469 cells induced by H2O2. *CARBOHYD POLYM* 2017 Nov 1;175:538-546.
 73. Ha M, Wei L, Guan X, Li L, Liu C. p53-dependent apoptosis contributes to di-(2-ethylhexyl) phthalate-induced hepatotoxicity. *Environ Pollut* 2016 Jan;208(Pt B):416-25.
 74. Zhu Y, Wang Y, Yao R, Hao T, Cao J, Huang H, Wang L, Wu Y. Enhanced neuroinflammation mediated by DNA methylation of the glucocorticoid receptor triggers cognitive dysfunction after sevoflurane anesthesia in adult rats subjected to maternal separation during the neonatal period. *J NEUROINFLAMM* 2017 Jan 7;14(1):6.
 75. Dong YF, Chen ZZ, Zhao Z, Yang DD, Yan H, Ji J, Sun XL. Potential role of microRNA-7 in the anti-neuroinflammation effects of nicorandil in astrocytes induced by oxygen-glucose deprivation. *J NEUROINFLAMM* 2016 Mar 9;13(1):60.
 76. Zhang Y, Zhang Q, Zhang M, Yuan M, Wang Z, Zhang J, Zhou X, Zhang Y, Lin F, Na H, Ren S, Zuo Y. DC - SIGNR by influencing the lncRNA HNRNPKP2 upregulates the expression of CXCR4 in gastric cancer liver metastasis. *Mol Cancer* 2017 Apr 13;16(1):78.
 77. Wang L, Zhang S, Cheng H, Lv H, Cheng G, Ci X. Nrf2-mediated liver protection by esculentoside A against acetaminophen toxicity through theAMPK/Akt/GSK3 β pathway. *FREE RADICAL BIO MED* 2016 Dec;101:401-412.
 78. Huang T, Liu R, Fu X, Yao D, Yang M, Liu Q, Lu WW, Wu C, Guan M . Aging Reduces an ER α -Directed Mitochondrial Glutaminase Expression Suppressing Glutamine Anaplerosis and Osteogenic Differentiation of Mesenchymal Stem Cells. *Stem Cells* 2017 Feb;35(2):411-424.
 79. Zhang L, Xiong W, Li N, Liu H, He H, Du Y, Zhang Z, Liu Y. Estrogen stabilizes hypoxia-inducible factor 1 α through G protein-coupled estrogen receptor 1 in eutopic endometrium of endometriosis. *Fertil Steril* 2017 Feb;107(2):439-447.
 80. Hao Y, Zheng C, Wang L, Zhang J, Niu X, Song Q, Feng Q, Zhao H, Li L, Zhang H, Zhang Z, Zhang Y. Tumor acidity-activatable manganese phosphate nanoplatfor for amplification of photodynamic cancer therapy and magnetic resonance imaging. *Acta Biomater* 2017 Oct 15;62:293-305.
 81. Zhu Y, Wang Y, Yao R, Hao T, Cao J, Huang H, Wang L, Wu Y . Enhanced neuroinflammation mediated by DNA methylation of the glucocorticoid receptor triggers cognitive dysfunction after sevoflurane anesthesia in adult rats subjected to maternal separation during the neonatal period. *J NEUROINFLAMM* 2017 Jan 7;14(1):6.
 82. Han D, Li X, Li S, Su T, Fan L, Fan WS, Qiao HY, Chen JW, Fan MM, Li XJ, Wang YB, Ma S, Qiu Y, Tian ZH, Cao F. Reduced silent information regulator 1 signaling exacerbates sepsis-induced myocardial injury and mitigates the protective effect of a liver X receptor agonist. *FREE RADICAL BIO MED* 2017 Dec;113:291-303.
 83. Wang T, Hou J, Su C, Zhao L, Shi Y . Hyaluronic acid-coated chitosan nanoparticles induce ROS-mediated tumor cell apoptosis and enhance antitumor efficiency by targeted drug delivery via CD44. *J NANOBIOTECHNOL* 2017 Jan 10;15(1):7.
 84. Bin Feng, Meng R, Bin Huang, Bi Y, Shen S, Zhu D. Silymarin protects against renal injury through normalization of lipid metabolism and mitochondrial biogenesis in high fat-fed mice. *FREE RADICAL BIO MED* 2017 Sep;110:240-249.
 85. Yang F, Yang L, Li Y, Yan G, Feng C, Liu T, Gong R, Yuan Y, Wang N, Idiatullina E, Bikkuzin T, Pavlov V, Li Y, Dong C, Wang D, Cao Y, Han Z, Zhang L, Huang Q, Ding F, Bi Z, Cai B. Melatonin protects bone marrow mesenchymal stem cells against

- iron overload-induced aberrant differentiation and senescence. *J Pineal Res* 2017 Oct;63(3).
86. Fu Y, Wu P, Pan Y, Sun X, Yang H, Difiglia M, Lu B. A toxic mutant huntingtin species is resistant to selective autophagy. *Nat Chem Biol* 2017 Nov;13(11):1152-1154.
 87. Zhenjiang Liu, Lu Gan, Yatao Xu, Dan Luo, Qian Ren, Song Wu, Chao Sun. Melatonin alleviates inflammasome - induced pyroptosis through inhibiting NF - κ B/GSDMD signal in mice adipose tissue. *JOURNAL OF PINEAL RESEARCH* 11 April 2017.
 88. Zhibo Li, Zhongyu Jiang, Lei Zhao, Xianrui Yang, Jin Zhang, Xianjing Song, Bin Liu, Jianxun Ding. PEGylated stereocomplex polylactide coating of stent for upregulated biocompatibility and drug storage. *MAT SCI ENG C-MATER* 1 December 2017, Pages 443-451.
 89. Shuo Zhang, Jiali Chang, Chao Lin, Yiran Pan, Kangping Cui, Xiaoyuan Zhang, Peng Liang, Xia Huang. Enhancement of methanogenesis via direct interspecies electron transfer between Geobacteraceae and Methanosaetaceae conducted by granular activated carbon. *Bioresource Technology* Volume 245, Part A, December 2017, Pages 132-137.
 90. Yun Xiao, Xiaoyu Wang, Ben Wang, Xueyao Liu, Xurong Xu, Ruikang Tang. Long-term Effect of Biomaterialized Insulin Nanoparticles on Type 2 Diabetes Treatment. *Theranostics* 2017; 7(17): 4301-4312.
 91. Zhi-qiang Yuan, Wei-liang Chen, Ben-gang You, Yang Liu, Shu-di Yang, Ji-zhao Li, Wen-jing Zhu, Xiao-feng Zhou, Chun Liu, Xue-nong Zhang. Multifunctional nanoparticles co-delivering EZH2 siRNA and etoposide for synergistic therapy of orthotopic non-small-cell lung tumor. *Journal of Controlled Release* Volume 268, 28 December 2017, Pages 198-211.
 92. Lixia Mao, Lunguo Xia, Jiang Chang, Jiaqiang Liu, Lingyong Jiang, Chengtie Wu, Bing Fang. The synergistic effects of Sr and Si bioactive ions on osteogenesis, osteoclastogenesis and angiogenesis for osteoporotic bone regeneration. *Acta Biomaterialia* Volume 61, 1 October 2017, Pages 217-232.
 93. Han D, Gu X, Gao J, Wang Z, Liu G, Barkema HW, Han B Chlorogenic acid promotes the Nrf2/HO-1 anti-oxidative pathway by activating p21Waf1/Cip1 to resist dexamethasone-induced apoptosis in osteoblastic cells. *FREE RADICAL BIO MED* 2019 Jun 137:1-12.
 94. Cao Q, He Z, Sun WQ, Fan G, Zhao J, Bao N, Ye T Improvement of calcium phosphate scaffold osteogenesis in vitro via combination of glutamate-modified BMP-2 peptides. *MAT SCI ENG C-MATER* 2019 Mar 96:412-418.
 95. Li Y, Li R, Ouyang N, Dai K, Yuan P, Zheng L, Wang W Investigating the impact of local inflammation on granulosa cells and follicular development in women with ovarian endometriosis. *Fertil Steril* 2019 Nov 112(5):882-891.e1.
 96. Zeng YJ, Yang HR, Zong MH, Yang JG, Lou WY Novel antibacterial polysaccharides produced by endophyte *Fusarium solani* DO7. *BIORESOURCE TECHNOL* 2019 Sep 288:121596.
 97. Mengyu Liu, Huifeng Pi, Yu Xi, Liting Wang, Li Tian, Mengyan Chen, Jia Xie, Ping Deng, Tao Zhang, Chao Zhou, Yidan Liang, Lei Zhang, Mindi He, Yonghui Lu, Chunhai Chen, Zhengping Yu, Zhou Zhou KIF5A-dependent axonal transport deficiency disrupts autophagic flux in trimethyltin chloride-induced neurotoxicity *Autophagy* 2021 Apr;17(4):903-924.
 98. Yawen Chen, Dan Xu, Xuan Xia, Guanghui Chen, Hao Xiao, Liaobin Chen, Hui Wang Sex difference in adrenal developmental toxicity induced by dexamethasone and its intrauterine programming mechanism *Pharmacol Res* 2021 Dec;174:105942.
 99. Wancheng Liu, Meiling Gao, Lili Li, Yu Chen, Huimin Fan, Qiaomei Cai, Yueyue Shi, Chaohu Pan, Junxiao Liu, Lucy S Cheng, Heng Yang, Genhong Cheng Homeoprotein SIX1 compromises antitumor immunity through TGF- β -mediated regulation of collagens *Cell Mol Immunol* 2021 Dec;18(12):2660-2672.
 100. Qing-Rui Wu, Dan-Lin Zheng, Pei-Ming Liu, Hui Yang, Lu-An Li, Su-Juan Kuang, Ying-Yu Lai, Fang Rao, Yu-Mei Xue, Ji-Jin Lin, Shuang-Xin Liu, Chun-Bo Chen, Chun-Yu Deng High glucose induces Drp1-mediated mitochondrial fission via the Ora1 calcium channel to participate in diabetic cardiomyocyte hypertrophy *Cell Death Dis* 2021 Feb 26;12(2):216.
 101. Hailong Ruan, Lin Bao, Zhen Tao, Ke Chen Flightless I Homolog Reverses Enzalutamide Resistance through PD-L1-Mediated Immune Evasion in Prostate Cancer *Cancer Immunol Res* 2021 Jul;9(7):838-852.
 102. Mengzhu Zheng, Junfeng Huo, Xiaoxia Gu, Yali Wang, Canrong Wu, Qingzhe Zhang, Wang Wang, Yang Liu, Yu Liu, Xuechen Zhou, Lixia Chen, Yirong Zhou, Hua Li Rational Design and Synthesis of Novel Dual PROTACs for Simultaneous Degradation of EGFR and PARP *J Med Chem* 2021 Jun 10;64(11):7839-7852.
 103. Xiaohan Gong, Jinzhi Zhang, Caiyun Ge, Yiwen Yi, Shiyun Dai, Guanlan Fan, Changrong Li, Yuanzhen Zhang, Hui Wang, Dan Xu miRNA320a-3p/RUNX2 signal programming mediates the transgenerational inheritance of inhibited ovarian estrogen synthesis in female offspring rats induced by prenatal dexamethasone exposure *Pharmacol Res* 2021 Mar;165:105435.
 104. Yiliang Wang, Weisheng Luo, Lianzhou Huang, Ji Xiao, Xiaowei Song, Feng Li, Yuying Ma, Xiaohui Wang, Fujun Jin, Ping Liu, Yexuan Zhu, Kaio Kitazato, Yifei Wang, Zhe Ren A novel lncRNA linc-AhRA negatively regulates innate antiviral response in murine microglia upon neurotropic herpesvirus infection *Theranostics* 2021 Sep 21;11(19):9623-9651.
 105. Yanlin Chen, Liping Yang, Yilu Qin, Shuiqing Liu, Yina Qiao, Xueying Wan, Huan Zeng, Xiaoli Tang, Manran Liu, Yixuan Hou Effects of differential distributed-JUP on the malignancy of gastric cancer *J Adv Res* 2020 Jul 6;28:195-208.
 106. Cheng Wang, Shaobo Wang, Yin Chen, Jianqi Zhao, Songling Han, Gaomei Zhao, Jing Kang, Yong Liu, Liting Wang, Xiaoyang Wang, Yang Xu, Song Wang, Yi Huang, Junping Wang, Jinghong Zhao Membrane Nanoparticles Derived from ACE2-Rich Cells Block SARS-CoV-2 Infection *ACS Nano* 2021 Apr 27;15(4):6340-6351.
 107. Baoming Xie, Mingqiu Zhao, Dan Song, Keke Wu, Lin Yi, Wenhui Li, Xiaoming Li, Kun Wang, Jinding Chen Induction of autophagy and suppression of type I IFN secretion by CSFV Autophagy *2021 Apr;17(4):925-947.*
 108. Qian Zheng, Pengfei Li, Xin Zhou, Yulong Qiang, Jiachen Fan, Yan Lin, Yurou Chen, Jing Guo, Fan Wang, Haihua Xue, Jie Xiong, Feng Li Deficiency of the X-inactivation escaping gene KDM5C in clear cell renal cell carcinoma promotes tumorigenicity by reprogramming glycogen metabolism and inhibiting ferroptosis *Theranostics* 2021 Aug 4;11(18):8674-8691.
 109. Mohan Li, Haikun Yu, Jiali Chen, Rayhngul Abdlla, Aicheng Liu, Wanying Song, Juan Zhang, Xiumin Zhang, Xiqing Yue, Qilong Li Novel insights into whey protein differences between donkey and bovine milk *Food Chem* 2021 Dec 15;365:130397.
 110. Huina Wang, Xiuli Yi, Sen Guo, Sijia Wang, Jinyuan Ma, Tao Zhao, Qiong Shi, Yangzi Tian, Hao Wang, Lintao Jia, Tianwen Gao, Chunying Li, Weinan Guo The XBP1-MARCH5-MFN2 Axis Confers Endoplasmic Reticulum Stress Resistance by Coordinating Mitochondrial Fission and Mitophagy in Melanoma *J Invest Dermatol* 2021 Dec;141(12):2932-2943.e12.
 111. Xiaozhen Zhang, Xing Huang, Jian Xu, Enliang Li, Mengyi Lao, Tianyu Tang, Gang Zhang, Chengxiang Guo, Xiaoyu Zhang, Wen Chen, Dipesh Kumar Yadav, Xueli Bai, Tingbo Liang NEK2 inhibition triggers anti-pancreatic cancer immunity by targeting PD-L1 *Nat Commun* 2021 Jul 27;12(1):4536.
 112. Qinjie Liu, Jie Wu, Xufei Zhang, Xuanheng Li, Xiuwen Wu, Yun Zhao, Jianan Ren Circulating mitochondrial DNA-triggered autophagy dysfunction via STING underlies sepsis-related acute lung injury *Cell Death Dis* 2021 Jul 3;12(7):673.
 113. Chengxiao Ma, Wen Zhang, Wengcong Wang, Jiabing Shen, Kefu Cai, Mei Liu, Maohong Cao SKP-SCs transplantation alleviates 6-OHDA-induced dopaminergic neuronal injury by modulating autophagy *Cell Death Dis* 2021 Jul 5;12(7):674.
 114. Songsong Wang, Feiya Sheng, Liang Zou, Jianbo Xiao, Peng Li Hyperoside attenuates non-alcoholic fatty liver disease in rats via cholesterol metabolism and bile acid metabolism *J Adv Res* 2021 Jun 8;34:109-122.
 115. Yin Li, Hao Sheng, Feng Ma, Qiang Wu, Jianfang Huang, Qiang Chen, Lianghe Sheng, Xinghai Zhu, Xiaoxi Zhu, Meng Xu RNA m6A reader YTHDF2 facilitates lung adenocarcinoma cell proliferation and metastasis by targeting the AXIN1/Wnt/ β -catenin signaling *Cell Death Dis* 2021 May 13;12(5):479.

116. Xiaolei Hu, Ling Xu, Xuwei Fu, Jiao Huang, Ping Ji, Zhiwei Zhang, Feng Deng, Xiaomian Wu The TiO₂-μ implant residual is more toxic than the Al₂O₃-n implant residual via blocking LAP and inducing macrophage polarization *Nanoscale* 2021 May 20;13(19):8976-8990.
117. Yuexin Wei, Yu Zhou, Chunlan Long, Huan Wu, Yifan Hong, Yan Fu, Junke Wang, Yuhao Wu, Lianju Shen, Guanghui Wei Polystyrene microplastics disrupt the blood-testis barrier integrity through ROS-Mediated imbalance of mTORC1 and mTORC2 *Environ Pollut* 2021 Nov 15;289:117904.
118. Meixi Peng, Jun Ren, Yipei Jing, Xueke Jiang, Qiaoling Xiao, Junpeng Huang, Yonghong Tao, Li Lei, Xin Wang, Zailin Yang, Zesong Yang, Qian Zhan, Can Lin, Guoxiang Jin, Xian Zhang, Ling Zhang Tumour-derived small extracellular vesicles suppress CD8+ T cell immune function by inhibiting SLC6A8-mediated creatine import in NPM1-mutated acute myeloid leukaemia *J Extracell Vesicles* 2021 Nov;10(13):e12168.
119. Lingming Kong, Jie Deng, Xiang Zhou, Binbin Cai, Baofu Zhang, Xiaohu Chen, Zongjing Chen, Weiming Wang Sitagliptin activates the p62-Keap1-Nrf2 signalling pathway to alleviate oxidative stress and excessive autophagy in severe acute pancreatitis-related acute lung injury *Cell Death Dis* 2021 Oct 11;12(10):928.
120. Wanbing He, Jieping Huang, Yang Liu, Changming Xie, Kun Zhang, Xinhong Zhu, Jie Chen, Hui Huang Deletion of soluble epoxide hydrolase suppressed chronic kidney disease-related vascular calcification by restoring Sirtuin 3 expression *Cell Death Dis* 2021 Oct 23;12(11):992.
121. Chao Zhang, Xiao-Chang Wu, Sha Li, Lian-Jie Dou, Li Zhou, Feng-Hui Wang, Kai Ma, Dan Huang, Ying Pan, Ji-Jun Gu, Ji-Yu Cao, Hua Wang, Jia-Hu Hao Perinatal low-dose bisphenol AF exposure impairs synaptic plasticity and cognitive function of adult offspring in a sex-dependent manner *Sci Total Environ* 2021 Sep 20;788:147918.
122. Tanjing Song, Qingli Zou, Yingying Yan, Suli Lv, Neng Li, Xuefeng Zhao, Xianyun Ma, Haigang Liu, Borui Tang, Lidong Sun DOT1L O-GlcNAcylation promotes its protein stability and MLL-fusion leukemia cell proliferation *Cell Rep* 2021 Sep 21;36(12):109739.
123. Donghui Zhang, Qi Chen, Yufang Bi, Haodong Zhang, Minzhang Chen, Jianglin Wan, Chao Shi, Wenjing Zhang, Junyu Zhang, Zhongqian Qiao, Jin Li, Shengfu Chen, Runhui Liu Bio-inspired poly-DL-serine materials resist the foreign-body response *Nat Commun* 2021 Sep 7;12(1):5327.
124. Shuangqi Fan, Keke Wu, Mingqiu Zhao, Jin Yuan, Shengming Ma, Erpeng Zhu, Yuming Chen, Hongxing Ding, Lin Yi, Jinding Chen LDHB inhibition induces mitophagy and facilitates the progression of CSFV infection *Autophagy* 2021 Sep;17(9):2305-2324.
125. Han Lu, Hui-Li Yang, Wen-Jie Zhou, Zhen-Zhen Lai, Xue-Min Qiu, Qiang Fu, Jian-Yuan Zhao, Jian Wang, Da-Jin Li, Ming-Qing Li Rapamycin prevents spontaneous abortion by triggering decidual stromal cell autophagy-mediated NK cell residence *Autophagy* 2021 Sep;17(9):2511-2527.
126. Qinghai Meng, Yu Li, Tingting Ji, Ying Chao, Jun Li, Yu Fu, Suyun Wang, Qi Chen, Wen Chen, Fuhua Huang, Youran Wang, Qichun Zhang, Xiaoliang Wang, Huimin Bian Estrogen prevent atherosclerosis by attenuating endothelial cell pyroptosis via activation of estrogen receptor α-mediated autophagy *J Adv Res* 2020 Aug 24;28:149-164.
127. 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.
128. Jianlong Zhao, Qinghua Sun, Michaël Quentin, Jian Ling, Pierre Abad, Xiaoping Zhang, Yan Li, Yuhong Yang, Bruno Favery, Zhenchuan Mao, Bingyan Xie A Meloidogyne incognita C-type lectin effector targets plant catalases to promote parasitism *New Phytol* 2021 Dec;232(5):2124-2137.
129. Yang Liu, Xue-Bin Hu, Li-Zhi Zhang, Zi Wang, Rong Fu Knockdown of Arginyl-tRNA Synthetase Attenuates Ischemia-Induced Cerebral Cortex Injury in Rats After Middle Cerebral Artery Occlusion *Transl Stroke Res* 2021 Feb;12(1):147-163.
130. De-Bo Zou, Zongyou Mou, Wenliang Wu, Haichun Liu TRIM33 protects osteoblasts from oxidative stress-induced apoptosis in osteoporosis by inhibiting FOXO3a ubiquitylation and degradation *Aging Cell* 2021 Jul;20(7):e13367.
131. Qian Qu, Yan Li, Zhenyan Zhang, Hengzheng Cui, Qianqiu Zhao, Wanyue Liu, Tao Lu, Haifeng Qian Effects of S-metolachlor on wheat (*Triticum aestivum* L.) seedling root exudates and the rhizosphere microbiome *J Hazard Mater* 2021 Jun 5;411:125137.
132. Wentao Shao, Jin Xu, Cheng Xu, Zhenkun Weng, Qian Liu, Xin Zhang, Jingjia Liang, Wenxiang Li, Yi Zhang, Zhaoyan Jiang, Aihua Gu Early-life perfluorooctanoic acid exposure induces obesity in male offspring and the intervention role of chlorogenic acid *Environ Pollut* 2021 Mar 1;272:115974.
133. Guopeng Lin, Xuzhi Wan, Dan Liu, Yuxi Wen, Chengfeng Yang, Chao Zhao COL1A1 as a potential new biomarker and therapeutic target for type 2 diabetes *Pharmacol Res* 2021 Mar;165:105436.
134. Xupeng Mu, Meng Zhang, Anhui Wei, Fei Yin, Yan Wang, Kebang Hu, Jinlan Jiang Doxorubicin and PD-L1 siRNA co-delivery with stem cell membrane-coated polydopamine nanoparticles for the targeted chemioimmunotherapy of PCa bone metastases *Nanoscale* 2021 May 21;13(19):8998-9008.
135. Yuqiong Chen, Su Li, Yan Zhang, Mengshen Wang, Xinyan Li, Shuang Liu, Dengyue Xu, Yandong Bao, Pengyu Jia, Nan Wu, Yao Lu, Dalin Jia The lncRNA Malat1 regulates microvascular function after myocardial infarction in mice via miR-26b-5p/Mfn1 axis-mediated mitochondrial dynamics *Redox Biol* 2021 May;41:101910.
136. Mengyuan Cen, Wei Ouyang, Wanying Zhang, Liping Yang, Xiuhui Lin, Min Dai, Huiqun Hu, Huifang Tang, Hongyun Liu, Jingyan Xia, Feng Xu MitoQ protects against hyperpermeability of endothelium barrier in acute lung injury via a Nrf2-dependent mechanism *Redox Biol* 2021 May;41:101936.
137. 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.
138. Jin-Yu Liu, Ya-Jing Chen, Huan-Hui Feng, Zhan-Li Chen, Yun-Long Wang, Jin-E Yang, Shi-Mei Zhuang LncRNA SNHG17 interacts with LRP1 to stabilize c-Myc protein and promote G1/S transition and cell proliferation *Cell Death Dis* 2021 Oct 20;12(11):970.
139. Yike Wang, Lifeng Dong, Fang Wan, Fangfang Chen, Dianlei Liu, Deqin Chen, Jingpei Long MiR-9-3p regulates the biological functions and drug resistance of gemcitabine-treated breast cancer cells and affects tumor growth through targeting MTDH *Cell Death Dis* 2021 Sep 22;12(10):861.
140. Tao Li, Bin Fu, Xin Zhang, Yunjiang Zhou, Mengdi Yang, Mengran Cao, Yaxin Chen, Yingying Tan, Rong Hu Overproduction of Gastrointestinal 5-HT Promotes Colitis-Associated Colorectal Cancer Progression via Enhancing NLRP3 Inflammasome Activation *Cancer Immunol Res* 2021 Sep;9(9):1008-1023.
141. Zedong Yan, Dan Wang, Jing Cai, Liangliang Shen, Maogang Jiang, Xiyu Liu, Jinghui Huang, Yong Zhang, Erping Luo, Da Jing High-specificity protection against radiation-induced bone loss by a pulsed electromagnetic field *Sci Adv* 2022 Aug 26;8(34):eabq0222.
142. Yuting Chen, Eriona Hysolli, Anlu Chen, Stephen Casper, Songlei Liu, Kevin Yang, Chenli Liu, George Church Multiplex base editing to convert TAG into TAA codons in the human genome *Nat Commun* 2022 Aug 2;13(1):4482.
143. Huanhuan Cui, Hongyang Yi, Hongyu Bao, Ying Tan, Chi Tian, Xinyao Shi, Diwen Gan, Bin Zhang, Weizheng Liang, Rui Chen, Qionghua Zhu, Liang Fang, Xin Gao, Hongda Huang, Ruijun Tian, Silke R Sperling, Yuhui Hu, Wei Chen The SWI/SNF chromatin remodeling factor DPF3 regulates metastasis of ccRCC by modulating TGF-β signaling *Nat Commun* 2022 Aug 9;13(1):4680.
144. Qing Li, Liren Zhang, Wenhua You, Jiali Xu, Jingjing Dai, Dongxu Hua, Ruizhi Zhang, Feifan Yao, Suiqing Zhou, Wei Huang, Yongjiu Dai, Yu Zhang, Tasiken Baheti, Xiaofeng Qian, Liyong Pu, Jing Xu, Yongxiang Xia, Chuanyong Zhang, Jinhai Tang, Xuehao Wang PRDM1/BLIMP1 induces cancer immune evasion by

- modulating the USP22-SPI1-PD-L1 axis in hepatocellular carcinoma cells *Nat Commun* 2022 Dec 12;13(1):7677.
145. Zilong Zheng, Guokai Yan, Xiuzhi Li, Yuke Fei, Lingling Sun, Haonan Yu, Yaorong Niu, Weihua Gao, Qing Zhong, Xianghua Yan Lysine crotonylation regulates leucine-deprivation-induced autophagy by a 14-3-3 ϵ -PPM1B axis *Cell Rep* 2022 Dec 20;41(12):111850.
146. Yayun Gu, Yan Zhou, Sihan Ju, Xiaofei Liu, Zicheng Zhang, Jia Guo, Jimiao Gao, Jie Zang, Hao Sun, Qi Chen, Jinghan Wang, Jiani Xu, Yiqun Xu, Yingjia Chen, Yueshuai Guo, Juncheng Dai, Hongxia Ma, Cheng Wang, Guangfu Jin, Chaojun Li, Yankai Xia, Hongbing Shen, Yang Yang, Xuejiang Guo, Zhibin Hu Multi-omics profiling visualizes dynamics of cardiac development and functions *Cell Rep* 2022 Dec 27;41(13):111891.
147. Hong-Sheng Chen, Ji Wang, Hou-Hong Li, Xiao Wang, Shao-Qi Zhang, Tan Deng, Yu-Ke Li, Ruo-Si Zou, Hua-Jie Wang, Rui Zhu, Wen-Long Xie, Gang Zhao, Fang Wang, Jian-Guo Chen Long noncoding RNA Gm2694 drives depressive-like behaviors in male mice by interacting with GRP78 to disrupt endoplasmic reticulum homeostasis *Sci Adv* 2022 Dec 2;8(48):eabn2496.
148. Wei Yang, Bo Mu, Jing You, Chenyu Tian, Huachao Bin, Zhiqiang Xu, Liting Zhang, Ronggang Ma, Ming Wu, Guo Zhang, Chong Huang, Linli Li, Zhenhua Shao, Lunzhi Dai, Laurent Désaubry, Shengyong Yang Non-classical ferroptosis inhibition by a small molecule targeting PHB2 *Nat Commun* 2022 Dec 3;13(1):7473.
149. Yuhan Chang, Juan Zhang, Xinying Huo, Xinliang Qu, Chunlei Xia, Kaizong Huang, Fuyang Xie, Nuofan Wang, Xiaowei Wei, Qiong Jia Substrate rigidity dictates colorectal tumorigenic cell stemness and metastasis via CRAD-dependent mechanotransduction *Cell Rep* 2022 Feb 15;38(7):110390.
150. An Pan, Xiao-Meng Sun, Feng-Qing Huang, Jin-Feng Liu, Yuan-Yuan Cai, Xin Wu, Raphael N Alolga, Ping Li, Bao-Lin Liu, Qun Liu, Lian-Wen Qi The mitochondrial β -oxidation enzyme HADHA restrains hepatic glucagon response by promoting β -hydroxybutyrate production *Nat Commun* 2022 Jan 19;13(1):386.
151. Xin Guan, Liping Sun, Yuting Shen, Fengshan Jin, Xiaowan Bo, Chunyan Zhu, Xiaoxia Han, Xiaolong Li, Yu Chen, Huixiong Xu, Wenwen Yue Nanoparticle-enhanced radiotherapy synergizes with PD-L1 blockade to limit post-surgical cancer recurrence and metastasis *Nat Commun* 2022 May 20;13(1):2834.
152. Bingyan Wei, Tao Zhang, Pengyu Wang, Yihui Pan, Jiahui Li, Weizhong Chen, Min Zhang, Quanjiang Ji, Wenjuan Wu, Lefu Lan, Jianhua Gan, Cai-Guang Yang Anti-infective therapy using species-specific activators of *Staphylococcus aureus* ClpP *Nat Commun* 2022 Nov 14;13(1):6909.
153. Jing Gu, Rui-Kun Peng, Chun-Ling Guo, Meng Zhang, Jie Yang, Xiao Yan, Qian Zhou, Hongwei Li, Na Wang, Jinwei Zhu, Qin Ouyang Construction of a synthetic methodology-based library and its application in identifying a GIT/PIX protein-protein interaction inhibitor *Nat Commun* 2022 Nov 23;13(1):7176.
154. Jing Yan, Yuemei Zhang, Hairong Yu, Yicen Zong, Daixi Wang, Jiangfei Zheng, Li Jin, Xiangtian Yu, Caizhi Liu, Yi Zhang, Feng Jiang, Rong Zhang, Xiangnan Fang, Ting Xu, Mingyu Li, Jianzhong Di, Yan Lu, Xinran Ma, Jian Zhang, Weiping Jia, Cheng Hu GPSM1 impairs metabolic homeostasis by controlling a pro-inflammatory pathway in macrophages *Nat Commun* 2022 Nov 25;13(1):7260.
155. Zixiang Wang, Shourong Wang, Junchao Qin, Xiyu Zhang, Gang Lu, Hongbin Liu, Haiyang Guo, Ligang Wu, Victoria O Shender, Changshun Shao, Beihua Kong, Zhaojian Liu Splicing factor BUD31 promotes ovarian cancer progression through sustaining the expression of anti-apoptotic BCL2L12 *Nat Commun* 2022 Oct 21;13(1):6246.
156. Xuedong Chen, Yongfeng Wang, Yujun Wang, Qiuying Li, Xinyin Liang, Guang Wang, Jianglan Li, Ruji Peng, Yanghu Sima, Shiqing Xu Ectopic expression of sericin enables efficient production of ancient silk with structural changes in silkworm *Nat Commun* 2022 Oct 22;13(1):6295.
157. Wan Chang, Qingyu Luo, Xiaowei Wu, Yabing Nan, Pengfei Zhao, Lingqiang Zhang, Aiping Luo, Wenjie Jiao, Qiong Zhu, Yesheng Fu, Zhihua Liu OTUB2 exerts tumor-suppressive roles via STAT1-mediated CALML3 activation and increased phosphatidylserine synthesis *Cell Rep* 2022 Oct 25;41(4):111561.
158. Hongjuan Yao, Wenping Song, Rui Cao, Cheng Ye, Li Zhang, Hebing Chen, Junting Wang, Yuchen Shi, Rui Li, Yi Li, Xiujun Liu, Xiaofei Zhou, Rongguang Shao, Liang Li An EGFR/HER2-targeted conjugate sensitizes gemcitabine-sensitive and resistant pancreatic cancer through different SMAD4-mediated mechanisms *Nat Commun* 2022 Sep 20;13(1):5506.
159. Siyuan Dai, Xiaoyin Tang, Lili Li, Takao Ishidate, Ahmet R Ozturk, Hao Chen, Altair L Dude, Yong-Hong Yan, Meng-Qiu Dong, En-Zhi Shen, Craig C Mello A family of *C. elegans* VASA homologs control Argonaute pathway specificity and promote transgenerational silencing *Cell Rep* 2022 Sep 6;40(10):111265.
160. Guanlan Fan, Fan Wang, Yurou Chen, Qian Zheng, Jie Xiong, Qiongying Lv, Kejia Wu, Jiaqiang Xiong, Lei Wei, Dongqing Li, Jiachen Zhang, Wei Zhang, Feng Li The deubiquitinase OTUD1 noncanonically suppresses Akt activation through its N-terminal intrinsically disordered region *Cell Rep* 2023 Jan 31;42(1):11916.
161. Wentao Chen, Hao Luo, Lihong Zeng, Yuying Pan, Jonathan B Parr, Yinbo Jiang, Clark H Cunningham, Kelly L Hawley, Justin D Radolf, Wujian Ke, Jiangli Ou, Jianjiang Yang, Bin Yang, Heping Zheng A suite of PCR-LwCas13a assays for detection and genotyping of *Treponema pallidum* in clinical samples *Nat Commun* 2022 Aug 9;13(1):4671.
162. Weimin Shen, Bo Gong, Cencan Xing, Lin Zhang, Jiawei Sun, Yuling Chen, Changmei Yang, Lu Yan, Luxi Chen, Likun Yao, Guangyuan Li, Haiteng Deng, Xiaotong Wu, Anming Meng Comprehensive maturity of nuclear pore complexes regulates zygotic genome activation *Cell* 2022 Dec 22;185(26):4954-4970.e20.
163. Xiaoxuan Su, Leyang Yang, Kai Yang, Yijia Tang, Teng Wen, Yingmu Wang, Matthias C Rillig, Lena Rohe, Junliang Pan, Hu Li, Yong-Guan Zhu Estuarine plastisphere as an overlooked source of N₂O production *Nat Commun* 2022 Jul 6;13(1):3884.
164. Jianfei Yan, Minjuan Shen, Bingdong Sui, Weicheng Lu, Xiaoxiao Han, Qianqian Wan, Yingying Liu, Junjun Kang, Wenpin Qin, Zibing Zhang, Da Chen, Yuan Cao, Siqi Ying, Franklin R Tay, Li-Na Niu, Kai Jiao Autophagic LC3+ calcified extracellular vesicles initiate cartilage calcification in osteoarthritis *Sci Adv* 2022 May 13;8(19):eabn1556.
165. Ruiqing Wang, Xinyu Yang, Jinting Liu, Fang Zhong, Chen Zhang, Yuhong Chen, Tao Sun, Chunyan Ji, Daoxin Ma Gut microbiota regulates acute myeloid leukaemia via alteration of intestinal barrier function mediated by butyrate *Nat Commun* 2022 May 9;13(1):2522.
166. Jiao Wang, Qiong Huang, Xingbin Hu, Shuyi Zhang, Yu Jiang, Guangyu Yao, Kongzhen Hu, Xin Xu, Bishan Liang, Qijing Wu, Zhenfeng Ma, Yawen Wang, Chunlin Wang, Zhenzhen Wu, Xiaoxiang Rong, Wangjun Liao, Min Shi Disrupting Circadian Rhythm via the PER1-HK2 Axis Reverses Trastuzumab Resistance in Gastric Cancer *Cancer Res* 2022 Apr 15;82(8):1503-1517.
167. Wentao Liu, Bin Zhang, Dan Zhang, Feng Guo, Kun Ye, Liang Zhu, Xin Jin The RBP1/DAPK3/UBE3A signaling axis induces PBRM1 degradation to modulate the sensitivity of renal cell carcinoma to CDK4/6 inhibitors *Cell Death Dis* 2022 Apr 2;13(4):295.
168. Jinyuan Luoqian, Wenyong Yang, Xulong Ding, Qing-Zhang Tuo, Zheng Xiang, Zhaoyue Zheng, Yu-Jie Guo, Li Li, Pengbo Guan, Scott Ayton, Biao Dong, Huiyuan Zhang, Hongbo Hu, Peng Lei Ferroptosis promotes T-cell activation-induced neurodegeneration in multiple sclerosis *Cell Mol Immunol* 2022 Aug;19(8):913-924.
169. Xiaoyu Yu, Ying Bai, Bing Han, Minzi Ju, Tianci Tang, Ling Shen, Mingyue Li, Li Yang, Zhao Zhang, Guoku Hu, Jie Chao, Yuan Zhang, Honghong Yao Extracellular vesicle-mediated delivery of circDYM alleviates CUS-induced depressive-like behaviours *J Extracell Vesicles* 2022 Jan;11(1):e12185.
170. Shi-Lei Wang, Yu Wang, Lei Wu, Yuan-Yuan Cai, Zi-Chao Wang, Raphael N Alolga, Lian-Wen Qi, Bin Li, Feng-Qing Huang Paired Derivatization Approach with H/D-Labeled Hydroxylamine Reagents for Sensitive and Accurate Analysis of Monosaccharides by Liquid Chromatography Tandem Mass Spectrometry *Anal Chem* 2022 Mar 1;94(8):3590-3599.
171. Suhang Guo, Yi Peng, Yan Lou, Lijuan Cao, Junqing Liu, Nengming Lin, Sheng

- Cai, Yu Kang, Su Zeng, Lushan Yu Downregulation of the farnesoid X receptor promotes colorectal tumorigenesis by facilitating enterotoxigenic *Bacteroides fragilis* colonization *Pharmacol Res* 2022 Mar;177:106101.
172. Lei Cao, Huixiang Tian, Man Fang, Zhe Xu, Dongsheng Tang, Juan Chen, Jiye Yin, Haihua Xiao, Kun Shang, Hongbin Han, Xiangping Li Activating cGAS-STING pathway with ROS-responsive nanoparticles delivering a hybrid prodrug for enhanced chemo-immunotherapy *Biomaterials* 2022 Nov;290:121856.
173. Feng Shi, Zhiwei Wang, Qi Wu, Xiaohan Zhong, Min Zhang, Bowen Li, Wei Ren, Shun Yuan, Yuanyang Chen Iron deficiency promotes aortic media degeneration by activating endoplasmic reticulum stress-mediated IRE1 signaling pathway *Pharmacol Res* 2022 Sep;183:106366.
174. Yu Tang, Yu Han, Weixia Zhang, Yihan Yu, Lin Huang, Weishang Zhou, Wei Shi, Dandan Tian, Guangxu Liu Bisphenol A and microplastics weaken the antimicrobial ability of blood clams by disrupting humoral immune responses and suppressing hemocyte chemotactic activity *Environ Pollut* 2022 Aug 15;307:119497.
175. Doudou Jing, Wei Wu, Xuanzuo Chen, Hongwei Xiao, Zhenhao Zhang, Fengxia Chen, Zhicai Zhang, Jianxiang Liu, Zengwu Shao, Feifei Pu Quercetin encapsulated in folic acid-modified liposomes is therapeutic against osteosarcoma by non-covalent binding to the JH2 domain of JAK2 Via the JAK2-STAT3-PDL1 *Pharmacol Res* 2022 Aug;182:106287.
176. Hanlin Ma, Gonghua Qi, Fang Han, Wei Lu, Jiali Peng, Rongrong Li, Shi Yan, Cunzhong Yuan, Beihua Kong HMGB3 promotes PARP inhibitor resistance through interacting with PARP1 in ovarian cancer *Cell Death Dis* 2022 Mar 24;13(3):263.
177. Weili Wang, Zhenyu Liu, Yu Zhang, Liu Wang, Dongwei Meng, Xueqin Li, Jingbo Zhang, Yuzhang Wu, Xinyuan Zhou, Guoxiang Liu Benzyl butyl phthalate (BBP) induces lung injury and fibrosis through neutrophil extracellular traps *Environ Pollut* 2022 Sep 15;309:119743.
178. Yunzheng Li, Binghua Li, Yanchao Xu, Liyuan Qian, Tiancheng Xu, Gang Meng, Huan Li, Ye Wang, Laizhu Zhang, Xiang Jiang, Qi Liu, Yuanyuan Xie, Chunxiao Cheng, Beicheng Sun, Decai Yu GOT2 Silencing Promotes Reprogramming of Glutamine Metabolism and Sensitizes Hepatocellular Carcinoma to Glutamine Inhibitors *Cancer Res* 2022 Sep 16;82(18):3223-3235.
179. Dongxing Cao, Keyu Qian, Ying Zhao, Jie Hong, Haoyan Chen, Xiaohui Wang, Nailin Yang, Cheng Zhang, Jingkai Cao, Keyu Jia, Guangyu Wu, Mingming Zhu, Jun Shen, Ye Zhang, Zhe Cui, Zheng Wang Association of Neutrophil Extracellular Traps with Fistula Healing in Patients with Complex Perianal Fistulizing Crohn's Disease *J Crohns Colitis* 2023 Apr 19;17(4):580-592.
180. Hanshen Yang, Xiaozhen Zhang, Mengyi Lao, Kang Sun, Lihong He, Jian Xu, Yi Duan, Yan Chen, Honggang Ying, Muchun Li, Chengxiang Guo, Qingsong Lu, Sicheng Wang, Wei Su, Tingbo Liang, Xueli Bai Targeting ubiquitin-specific protease 8 sensitizes anti-programmed death-ligand 1 immunotherapy of pancreatic cancer *Cell Death Differ* 2023 Feb;30(2):560-575.
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