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PMSF

产品编号	产品名称	包装
ST505	PMSF	1g

产品简介:

- PMSF即Phenylmethanesulfonyl fluoride, 也称Phenylmethylsulfonyl fluoride或α-Toluenesulfonyl fluoride。中文名为苯甲基磺酰氟。分子式为C₇H₇FO₂S, 分子量为174.19, CAS Number 329-98-6, High Purity Grade, 纯度>99%。进口分装。
- 本产品为白色至微黄色粉末。
- 可抑制丝氨酸蛋白酶例如胰蛋白酶(trypsin)和胰凝乳蛋白酶(chymotrypsin), 也可抑制半胱氨酸蛋白酶和乙酰胆碱酯酶。有效浓度为0.1-1mM。
- 难溶于水, 且在水溶液中非常不稳定。可溶于异丙醇、乙醇和甲醇。

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产品编号	产品名称	包装
ST505	PMSF	1g
-	说明书	1份

保存条件:

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注意事项:

- 本产品对人体有毒, 操作时请特别小心, 并注意有效防护以避免直接接触人体或吸入体内。
- 本产品仅限于专业人员的科学的研究用, 不得用于临床诊断或治疗, 不得用于食品或药品, 不得存放于普通住宅内。
- 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

使用本产品的文献:

1. Xu B, Lian S, Guo JR, Wang JF, Zhang LP, Li SZ, Yang HM Activation of the MAPK signaling pathway induces upregulation of pro-apoptotic proteins in the hippocampi of cold stressed adolescent mice. Neurosci Lett 699:97-102.
2. Zhao JZ, Liu M, Xu LM, Zhang ZY, Cao YS, Shao YZ, Yin JS, Liu HB, Lu TY A chimeric recombinant infectious hematopoietic necrosis virus induces protective immune responses against infectious hematopoietic necrosis and infectious pancreatic necrosis in rainbow trout. Mol Immunol 116:180-190.
3. Fang W, Ye Q, Yao Y, Xiu Y, Gu F, Zhu Y Protective Effects of Trimetazidine in Retarding Selenite-Induced Lens Opacification. Curr Eye Res 44(12):1325-1336.
4. Sun Y, Hei M, Fang Z, Tang Z, Wang B, Hu N High-Mobility Group Box 1 Contributes to Cerebral Cortex Injury in a Neonatal Hypoxic-Ischemic Rat Model by Regulating the Phenotypic Polarization of Microglia. Front Cell Neurosci 13:506.
5. Jia Q, Cao H, Shen D, Yan L, Chen C, Xing S Fisetin, via CKIP-1/REGy, limits oxidized LDL-induced lipid accumulation and senescence in RAW264.7 macrophage-derived foam cells. Eur J Pharmacol 865:172748.
6. Xu B, Zang SC, Li SZ, Guo JR, Wang JF, Wang D, Zhang LP, Yang HM, Lian S HMGB1-mediated differential response on hippocampal neurotransmitter disorder and neuroinflammation in adolescent male and female mice following cold exposure. Brain Behav Immun 76:223-235.
7. Wu G, Xiong Q, Wei X, Wang Y, Hu X, He G, Liu L, Lai Q, Dai Z, Anushesh D, Xu Y Mitochondrial unfolded protein response gene CLPP changes mitochondrial dynamics and affects mitochondrial function. PeerJ 7:e7209.
8. Huang N, Li Y, Zhou Y, Feng F, Shi S, Ba Z, Luo Y Neuroprotective effect of tanshinone IIA-incubated mesenchymal stem cells on Aβ25-35-induced neuroinflammation. Behav Brain Res 365:48-55.
9. Li CG, Zeng QZ, Chen MY, Xu LH, Zhang CC, Mai FY, Zeng CY, He XH, Ouyang DY Evodiamine Augments NLRP3 Inflammasome Activation and Anti-bacterial Responses Through Inducing α-Tubulin Acetylation. Front Pharmacol 10:290.
10. Tong L, Xie C, Wei Y, Qu Y, Liang H, Zhang Y, Xu T, Qian X, Qiu H, Deng H Antitumor Effects of Berberine on Gliomas via Inactivation of Caspase-1-Mediated IL-1β and IL-18 Release. Front Oncol 9:364.
11. Chen X, Qian B, Kong X, Hao J, Ye Y, Yang K, Xu T, Zhang F A20 protects neuronal apoptosis stimulated by lipopolysaccharide-induced microglial exosomes. Neurosci Lett 712:134480.
12. Xu B, Lang LM, Lian S, Guo JR, Wang JF, Yang HM, Li SZ Oxidative Stress-Mediated MAPK Signaling Pathway Activation Induces Neuronal Loss in the CA1 and CA3 Regions of the Hippocampus of Mice Following Chronic Cold Exposure. Brain Sci 9(10). pii: E273.
13. Huang N, Zhang Y, Chen M, Jin H, Nie J, Luo Y, Zhou S, Shi J, Jin F Resveratrol delays 6-hydroxydopamine-induced apoptosis by activating the PI3K/Akt signaling pathway. Exp Gerontol

124:110653.

14. Jia Q, Cao H, Shen D, Li S, Yan L, Chen C, Xing S, Dou F. Quercetin protects against atherosclerosis by regulating the expression of PCSK9, CD36, PPAR γ , LXRa and ABCA1. *Int J Mol Med* 2014;34(3):893-902.
15. Peng Z, Liao Y, Wang X, Chen L, Wang L, Qin C, Wang Z, Cai M, Hu J, Li D, Yao P, Nüssler AK, Liu L, Yang W. Heme oxygenase-1 regulates autophagy through carbon-oxygen to alleviate deoxyxivalenol-induced hepatic damage. *Arch Toxicol* 2014;94(2):573-588.
16. Ruimin Ren, Yu Fan, Zhelun Peng, Sheng Wang, Yunqi Jiang, Liangliang Fu, Jianhua Cao, Shuhong Zhao, Heng Wang. Characterization and perturbation of CTCF-mediated chromatin interactions for enhancing myogenic transdifferentiation *Cell Rep* doi: 10.1016/j.celrep.2022.111206.
17. Shouqing Hou, Guo Li, Bingbing Xu, Haiyang Dong, Shixin Zhang, Ying Fu, Jilong Shi, Lei Li, Jiayan Fu, Feng Shi, Yijun Meng, Yongfeng Jin. Trans-splicing facilitated by RNA pairing greatly expands sDscam isoform diversity but not homophilic binding specificity *Sci Adv* doi: 10.1126/sciadv.abn9458.
18. Xueman Zhou, Jin Liu, Yingcheng Zheng, Zhenzhen Zhang, Yang Wu, Wenke Yang, Jiaqi Liu, Yanmei Huang, Yating Yi, Zhihe Zhao, Hengyi Xiao, Xianming Mo, Jun Wang. SM22 α -lineage niche cells regulate intramembranous bone regeneration via PDGFR β -triggered hydrogen sulfide production *Cell Rep* doi: 10.1016/j.celrep.2022.110750.
19. Hui Yang, Yurui Dong, Ying Bian, Nuo Xu, Yuwei Wu, Fan Yang, Yingping Du, Tao Qin, Sujuan Chen, Daxin Peng, Xiufan Liu. The influenza virus PB2 protein evades antiviral innate immunity by inhibiting JAK1/STAT signalling *Nat Commun* doi: 10.1038/s41467-022-33909-2.
20. Bijiang Geng, Jinyan Hu, Yuan Li, Shini Feng, Dengyu Pan, Lingyan Feng, Longxiang Shen. Near-infrared phosphorescent carbon dots for sonodynamic precision tumor therapy *Nat Commun* doi: 10.1038/s41467-022-33474-8.
21. Feng S, Cong S, Zhang X, Bao X, Wang W, Li H, Wang Z, Wang G, Xu J, Du B, Qu D, Xiong W, Yin M, Ren X, Wang F, He J, Zhang B. MicroRNA-192 targeting retinoblastoma 1 inhibits cell proliferation and induces cell apoptosis in lung cancer cells. *Nucleic Acids Res* 2011 Aug;39(15):6669-78.
22. Yu X, Tang J, Wang Q, Ye W, Tao K, Duan S, Lu C, Yang X, Dong S, Zheng X, Wang Y. The RxLR effector Avh241 from Phytophthora sojae requires plasma membrane localization to induce plant cell death. *New Phytol* 2012 Oct;196(1):247-60.
23. Yang L, Ping YF, Yu X, Qian F, Guo ZJ, Qian C, Cui YH, Bian XW. Gastric cancer stem-like cells possess higher capability of invasion and metastasis in association with a mesenchymal transition phenotype. *Cancer Lett* 2011 Nov 1;310(1):46-52.
24. Jiao J, Hong S, Zhang J, Ma L, Sun Y, Zhang D, Shen B, Zhu C. Opsin3 sensitizes hepatocellular carcinoma cells to 5-fluorouracil treatment by regulating the apoptotic pathway. *Cancer Lett* 2012 Jul 1;320(1):96-103.
25. Wang J, Liu X, Hong Y, Wang S, Chen P, Gu A, Guo X, Zhao P. Ibrutinib, a Bruton's tyrosine kinase inhibitor, exhibits antitumoral activity and induces autophagy in glioblastoma. *J EXP CLIN CANC RES* 2017 Jul 17;36(1):96.
26. 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.
27. Chen DG, Zhu B, Lv SQ, Zhu H, Tang J, Huang C, Li Q, Zhou P, Wang DL, Li GH. Inhibition of EGFR1 inhibits glioma proliferation by targeting CCND1 promoter. *J EXP CLIN CANC RES* 2017 Dec 15;36(1):186.
28. Zhang P, Lai ZL, Chen HF, Zhang M, Wang A, Jia T, Sun WQ, Zhu XM, Chen XF, Zhao Z, Zhang J. Curcumin synergizes with 5-fluorouracil by impairing AMPK/ULK1-dependent autophagy, AKTactivity and enhancing apoptosis in colon cancer cells with tumor growth inhibition in xenograft mice. *J EXP CLIN CANC RES* 2017 Dec 22;36(1):190.
29. 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.
30. Yang T, Cheng J, Yang Y, Qi W, Zhao Y, Long H, Xie R, Zhu B. S100B Mediates Stemness of Ovarian Cancer Stem-Like Cells Through Inhibiting p53. *Stem Cells* 2017 Feb;35(2):325-336.
31. Jin F, Wang Y, Wang X, Wu Y, Wang X, Liu Q, Zhu Y, Liu E, Fan J, Wang Y. Bre Enhances Osteoblastic Differentiation by Promoting the Mdm2-Mediated Degradation of p53. *Stem Cells* 2017 Jul;35(7):1760-1772.
32. Liu M, Yin K, Guo X, Feng H, Yuan M, Liu Y, Zhang J, Guo B, Wang C, Zhou G, Zhou Z, Zhang CY, Chen X. Diphthamide Biosynthesis 1 is a Novel Oncogene in Colorectal Cancer Cells and is Regulated by MiR-218-5p. *CELL PHYSIOL BIOCHEM* 2017;44(2):505-514.
33. Pan C, Yao G, Liu B, Ma T, Xia Y, Wei K, Wang J, Xu J, Chen L, Chen Y. Long Noncoding RNA FAL1 Promotes Cell Proliferation, Invasion and Epithelial-Mesenchymal Transition Through the PTEN/AKT Signaling Axis in Non-Small Cell Lung Cancer. *CELL PHYSIOL BIOCHEM* 2017;43(1):339-352.
34. Huang C, Xiang Y, Chen S, Yu H, Wen Z, Ye T, Sun H, Kong H, Li D, Yu D, Chen B, Zhou M. Dermokine contributes to epithelial-mesenchymal transition through increased activation of signal transducer and activator of transcription 3 in pancreatic cancer. *Cancer Sci* 2017 Nov;108(11):2130-2141.
35. Wang J, Pang W, Zuo Z, Zhang W, He W. MicroRNA-520b Suppresses Proliferation, Migration, and Invasion of Spinal Osteosarcoma Cells via Downregulation of Frizzled-8. *Oncol Res* 2017 Sep 21;25(8):1297-1304.
36. Ye XZ, Xu SL, Xin YH, Yu SC, Ping YF, Chen L, Xiao HL, Wang B, Yi L, Wang QL, Jiang XF, Yang L, Zhang P, Qian C, Cui YH, Zhang X, Bian XW. Tumor-associated microglia/macrophages enhance the invasion of glioma stem-like cells via TGF- β 1 signaling pathway. *J Immunol* 2012 Jul 1;189(1):444-53.
37. Li FF, Shen J, Shen HJ, Zhang X, Cao R, Zhang Y, Qui Q, Lin XX, Xie YC, Zhang LH, Jia YL, Dong XW, Jiang JX, Bao MJ, Zhang S, Ma WJ, Wu XM, Shen H, Xie QM, Ke Y. Shp2 Plays an Important Role in Acute Cigarette Smoke-Mediated Lung Inflammation. *J Immunol* 2012 Sep 15;189(6):3159-67.
38. Wang J, Chen Y, Zhang W, Zheng G, Meng S, Che H, Ke T, Yang J, Chen J, Luo W. Akt activation protects liver cells from apoptosis in rats during acute cold exposure. *Int J Biol Sci* 2013 May 25;9(5):509-17.
39. Zhu Y, Zhang L, Zha H, Yang F, Hu C, Chen L, Guo B, Zhu B. Stroma-derived Fibrinogen-like Protein 2 Activates Cancer-associated Fibroblasts to Promote Tumor Growth in Lung Cancer. *Int J Biol Sci* 2017 Jun 1;13(6):804-814.
40. Chen Y, Wang Z, Xie Y, Guo X, Tang X, Wang S, Yang S, Chen K, Niu Y, Ji W. Folic acid deficiency inhibits neural rosette formation and neuronal differentiation from rhesusmonkey embryonic stem cells. *J Neurosci Res* 2012 Jul;90(7):1382-91.
41. Chen HY, Wang JM, Wang HY, Zhang YX, Liu W, Pan L, Wang WH,

- Chen SF, Jin WG, Wang L. Effect of short hairpin RNA-induced CXCR4 silence on ovarian cancer cell. *Biomed Pharmacother* 2012 Oct;66(7):549-53.
42. Gao K, Ji Z, She K, Yang Q, Shao L. Long non-coding RNA ZFAS1 is an unfavourable prognostic factor and promotes glioma cellprogression by activation of the Notch signaling pathway. *Biomed Pharmacother* 2017 Mar;87:555-560.
43. He Z, Xu H, Meng Y, Kuang Y. miR-944 acts as a prognostic marker and promotes the tumor progression in endometrial cancer. *Biomed Pharmacother* 2017 Apr;88:902-910.
44. Xu Y, Wang Z, Jiang X, Cui Y. Overexpression of long noncoding RNA H19 indicates a poor prognosis for cholangiocarcinoma and promotes cell migration and invasion by affecting epithelial-mesenchymal transition. *Biomed Pharmacother* 2017 Aug;92:17-23.
45. Li R, Zhang Z, Wang J, Huang Y, Sun W, Xie R, Hu F, Lei T. Triptolide suppresses growth and hormone secretion in murine pituitary corticotroph tumor cellsvia NF-kappaB signaling pathway. *Biomed Pharmacother* 2017 Nov;95:771-779.
46. Huang W, Cheng P, Yu K, Han Y, Song M, Li Y. Hyperforin attenuates aluminum-induced A β production and Tau phosphorylation via regulatingAkt/GSK-3 β signaling pathway in PC12 cells. *Biomed Pharmacother* 2017 Dec;96:1-6.
47. Yao Y, Xu Y, Wang W, Zhang J, Li Q. Glucagon-like peptide-1 improves β -cell dysfunction by suppressing the miR-27a-induceddownregulation of ATP-binding cassette transporter A1. *Biomed Pharmacother* 2017 Dec;96:497-502.
48. Chen S, Lv X, Hu B, Shao Z, Wang B, Ma K, Lin H, Cui M. RIPK1/RIPK3/MLKL-mediated necroptosis contributes to compression-induced rat nucleuspulposus cells death. *Apoptosis* 2017 May;22(5):626-638.
49. Wang C, Xie H, Liu X, Qin Q, Wu X, Liu H, Liu C. Role of nuclear factor- κ B in volatile anaesthetic preconditioning with sevoflurane during myocardial ischaemia/reperfusion. *EUR J ANAESTH* 2010 Aug;27(8):747-56.
50. Feng DD, Zhang H, Zhang P, Zheng YS, Zhang XJ, Han BW, Luo XQ, Xu L, Zhou H, Qu LH, Chen YQ. Down-regulated miR-331-5p and miR-27a are associated with chemotherapy resistance andrelapse in leukaemia. *J Cell Mol Med* 2011 Oct;15(10):2164-75.
51. Yang K, Lu Y, Xie F, Zou H, Fan X, Li B, Li W, Zhang W, Mei L, Feng SS, Yin Y, Liu Y, Zhang H, Yin C, Zhong Y, Gao J. Cationic liposomes induce cell necrosis through lysosomal dysfunction and late-stage autophagic fluxinhibition. *NANOMEDICINE-UK* 2016 Dec;11(23):3117-3137.
52. Lai L, Song Y, Liu Y, Chen Q, Han Q, Chen W, Pan T, Zhang Y, Cao X, Wang Q. MicroRNA-92a negatively regulates Toll-like receptor (TLR)-triggered inflammatory response in macrophages bytargeting MKK4 kinase. *J Biol Chem* 2013 Mar 15;288(11):7956-67.
53. Lin J, Wang C, Zhang L, Wang T, Zhang J, Liang W, Li C, Qian G, Ouyang Y, Guo K, Zhang Y. Rab5 Enhances Classical Swine Fever Virus Proliferation and Interacts with Viral NS4B Protein to Facilitate Formation of NS4B Related Complex. *Front Microbiol* 2017 Aug 8;8:1468.
54. Sun L, Yuan Q, Xu T, Yao L, Feng J, Ma J, Wang L, Lu C, Wang D. Pioglitazone Improves Mitochondrial Function in the Remnant Kidney and Protects against RenalFibrosis in 5/6 Nephrectomized Rats. *Front Pharmacol* 2017 Aug 15;8:545.
55. Chen JH, Zhou LY, Xu S, Zheng YL, Wan YF, Hu CP. Overexpression of lncRNA HOXA11-AS promotes cell epithelial-mesenchymal transition by repressing miR-200b in non-small cell lung cancer. *Cancer Cell Int* 2017 Jun 12;17:64.
56. Wang K, Chen D, Qian Z, Cui D, Gao L, Lou M. Hedgehog/Gli1 signaling pathway regulates MGMT expression and chemoresistance to temozolomide in human glioblastoma. *Cancer Cell Int* 2017 Dec 4;17:117.
57. Zhou YZ, Li X, Gong WX, Tian JS, Gao XX, Gao L, Zhang X, Du GH, Qin XM. Protective effect of isoliquiritin against corticosterone-induced neurotoxicity in PC12 cells. *Food Funct* 2017 Mar 22;8(3):1235-1244.
58. Ding N, Zhao K, Lan Y, Li Z, Lv X, Su J, Lu H, Gao F, He W. Induction of Atypical Autophagy by Porcine Hemagglutinating Encephalomyelitis VirusContributes to Viral Replication. *FRONT CELL INFECT MI* 2017 Feb 28;7:56.
59. Yin H, Zhao L, Li S, Xu L, Wang Y, Chen H. Impaired Cellular Energy Metabolism Contributes to Duck-Enteritis-Virus-Induced Autophagy via the AMPK-TSC2-MTOR Signaling Pathway. *FRONT CELL INFECT MI* 2017 Sep 26;7:423.
60. Wang L, Qin Y, Tong L, Wu S, Wang Q, Jiao Q, Guo Z, Lin L, Wang R, Zhao W, Zhong Z. MiR-342-5p suppresses coxsackievirus B3 biosynthesis by targeting the 2C-coding region. *ANTIVIR RES* 2012 Feb;93(2):270-9.
61. Ye Q, Chen C, Si E, Cai Y, Wang J, Huang W, Li D, Wang Y, Chen X. Mitochondrial Effects of PGC-1alpha Silencing in MPP+ Treated Human SH-SY5Y NeuroblastomaCells. *Front Mol Neurosci* 2017 May 29;10:164.
62. Cai J, Yu C, Liu Y, Chen S, Guo Y, Yong J, Lu W, Ding M, Deng H. Generation of homogeneous PDX1(+) pancreatic progenitors from human ES cell-derivedendoderm cells. *J Mol Cell Biol* 2010 Feb;2(1):50-60.
63. Zhou D, Pan Q, Shen F, Cao HX, Ding WJ, Chen YW, Fan JG. Total fecal microbiota transplantation alleviates high-fat diet-induced steatohepatitis in mice viabeneficial regulation of gut microbiota. *SCI REP-UK* 2017 May 8;7(1):1529.
64. Chen X, Zhao X, Lan F, Zhou T, Cai H, Sun H, Kong W, Kong W. Hydrogen Sulphide Treatment Increases Insulin Sensitivity and Improves Oxidant Metabolism through the CaMKKbeta-AMPK Pathway in PA-Induced IR C2C12 Cells. *SCI REP-UK* 2017 Oct 16;7(1):13248.
65. Li P, Huang JJ, Ni JJ, Sun FY. VEGF evokes reactive astroglia to convert into neuronal cells by affecting the biological functionof MeCP2 in adult rat brain after cerebral ischemia. *Neurochem Int* 2012 Jul 20. pii: S0197-0186(12)00231-8.
66. Yang Y, Gao K, Hu Z, Li W, Davies H, Ling S, Rudd JA, Fang M. Autophagy upregulation and apoptosis downregulation in DAHP and triptolide treated cerebral ischemia. *MEDIAT INFLAMM* 2015;2015:120198.
67. Fang Z, Zhu Q, Gu T, Shen X, Yang Y, Liang Y, Zhang Z, Xu X. Anti-androgenic effects of bisphenol-A on spatial memory and synaptic plasticity of the hippocampus in mice. *Horm Behav* 2017 Jul;93:151-158.
68. Lv XH, Chen JW, Zhao G, Feng ZZ, Yang DH, Sun WW, Fan JS, Zhu GH. N-myc downstream-regulated gene 1/Cap43 may function as tumor suppressor in endometrialcancer. *J CANCER RES CLIN* 2012 Oct;138(10):1703-15.
69. Li TT, Zhu D, Mou T, Guo Z, Pu JL, Chen QS, Wei XF, Wu ZJ. IL-37 induces autophagy in hepatocellular carcinoma cells by inhibiting the PI3K/AKT/mTORpathway. *Mol Immunol* 2017 Jul;87:132-140.
70. Wang P, Lin C, Wu S, Huang K, Wang Y, Bao X, Zhang F, Huang Z, Teng H. Inhibition of Autophagy is Involved in the Protective Effects of Ginsenoside Rb1 on Spinal CordInjury. *Cell Mol Neurobiol*

2018 Apr;38(3):679-690.

71. Guo L, Zhang J, Yan Q, Yin M. Establishment and characterization of RNA-edited serotonin 2C receptor isoform cell models and alteration of amyloid precursor protein ectodomain secretion in HEK293 APPSwe cells. *Hum Cell* 2011 Jun;24(2):104-11.
72. Yu Y, Mu J, Fan Z, Lei G, Yan M, Wang S, Tang C, Wang Z, Yu J, Zhang G. Insulin-like growth factor 1 enhances the proliferation and osteogenic differentiation of human periodontal ligament stem cells via ERK and JNK MAPK pathways. *Histochem Cell Biol* 2012 Apr;137(4):513-25.
73. Qin Q, Wei F, Zhang J, Li B. miR-134 suppresses the migration and invasion of non small cell lung cancer by targeting ITGB1. *Oncol Rep* 2017 Feb;37(2):823-830.
74. Zhang H, Chen X, Li D, Cui L, Li X, Ye X, Wan X. DcR3 promotes hepatoma cell migration by downregulating E-cadherin expression. *Oncol Rep* 2017 Jul;38(1):377-383.
75. Chen LD, Liu ZH, Zhang LF, Yao JN, Wang CF. Sanggenon C induces apoptosis of colon cancer cells via inhibition of NO production, iNOS expression and ROS activation of the mitochondrial pathway. *Oncol Rep* 2017 Oct;38(4):2123-2131.
76. Ma P, Sun CQ, Wang YF, Pan YT, Chen QN, Liu WT, Liu J, Zhao CH, Shu YQ, Li W. KLF16 promotes proliferation in gastric cancer cells via regulating p21 and CDK4. *Am J Transl Res* 2017 Jun 15;9(6):3027-3036.
77. Gu CJ, Cheng J, Zhang B, Yang SL, Xie F, Sun JS, Huang LQ, Yu JJ, Li MQ. Protopanaxadiol and metformin synergistically inhibit estrogen-mediated proliferation and anti-autophagy effects in endometrial cancer cells. *Am J Transl Res* 2017 Sep 15;9(9):4071-4082.
78. Cao C, Wang W, Lu L, Wang L, Chen X, Guo R, Li S, Jiang J. Inactivation of Beclin-1-dependent autophagy promotes ursolic acid-induced apoptosis in hypertrophic scar fibroblasts. *Exp Dermatol* 2018 Jan;27(1):58-63.
79. Li C, Fu X, Lin Q, Liu L, Liang H, Huang Z, Li N. Autophagy promoted infectious kidney and spleen necrosis virus replication and decreased infectious virus yields in CPB cell line. *FISH SHELLFISH IMMUN* 2017 Jan;60:25-32.
80. Wu JL, Zou JY, Hu ED, Chen DZ, Chen L, Lu FB, Xu LM, Zheng MH, Li H, Huang Y, Jin XY, Gong YW, Lin Z, Wang XD, Zhao MF, Chen YP. Sodium butyrate ameliorates S100/FCA-induced autoimmune hepatitis through regulation of intestinal tight junction and toll-like receptor 4 signaling pathway. *Immunol Lett* 2017 Oct;190:169-176.
81. Wei Y, Hong H, Zhang X, Lai W, Wang Y, Chu K, Brown J, Hong G, Chen L. Salidroside Inhibits Inflammation Through PI3K/Akt/HIF Signaling After Focal Cerebral Ischemia in Rats. *Inflammation* 2017 Aug;40(4):1297-1309.
82. Li L, Han M, Li S, Wang L, Xu Y. Cyclic Tensile Stress During Physiological Occlusal Force Enhances Osteogenic Differentiation of Human Periodontal Ligament Cells via ERK1/2-Elk1 MAPK Pathway. *DNA Cell Biol* 2013 Aug 21;32(9):488-97.
83. Tang Y, Ye M, Du Y, Qiu X, Lv X, Yang W, Luo J. EGFR signaling upregulates surface expression of the GluN2B-containing NMDA receptor and contributes to long-term potentiation in the hippocampus. *Neuroscience* 2015 Sep 24;304:109-21.
84. Liu ML, Wen JJ, Xu XF, Zhao DM. Neurotoxic effect of the complex of the ovine prion protein (OvPrP(C)) and RNA on the cultured rat cortical neurons. *Neurochem Res* 2011 Oct;36(10):1863-9.
85. Pan JX. LncRNA H19 promotes atherosclerosis by regulating MAPK and NF- κ B signaling pathway. *EUR REV MED PHARMACO* 2017 Jan;21(2):322-328.
86. Wang J, Zhao C, Li J, Feng Y, Gong Y. Transcriptome analysis of the potential roles of FOXL2 in chicken pre-hierarchical and pre-ovulatory granulosa cells. *COMP BIOCHEM PHYS D* 2017 Mar;21:56-66.
87. Hua W, Jiang J, Rong X, Wu R, Qiu H, Zhang Y, Chen Q. The dual role of the cystathione gamma-lyase/hydrogen sulfide pathway in CVB3-induced myocarditis in mice. *BIOCHEM BIOPH RES CO* 2009 Oct 23;388(3):595-600.
88. He Y, Zhang H, Teng J, Huang L, Li Y, Sun C. Involvement of calcium-sensing receptor in inhibition of lipolysis through intracellular cAMP and calcium pathways in human adipocytes. *BIOCHEM BIOPH RES CO* 2011 Jan 7;404(1):393-9.
89. Chen X, Wu X, Zhao Y, Wang G, Feng J, Li Q, Qian G. A novel binding protein of single immunoglobulin IL-1 receptor-related molecule: Paralemmin-3. *BIOCHEM BIOPH RES CO* 2011 Jan 28;404(4):1029-33.
90. Shan LN, Chai WS, Lu SJ, Song YG, Su D, Yang S, Shi XB, Wang W. The significant effect of chronic intermittent hypoxia on prostaglandin D2 biosynthesis in rat brain. *BIOCHEM BIOPH RES CO* 2017 Jan 29;483(1):283-287.
91. Lin H, Zhao L, Ma X, Wang BC, Deng XY, Cui M, Chen SF, Shao ZW. Drp1 mediates compression-induced programmed necrosis of rat nucleus pulposus cells by promoting mitochondrial translocation of p53 and nuclear translocation of AIF. *BIOCHEM BIOPH RES CO* 2017 May 20;487(1):181-188.
92. Wang J, Feng Y, Wang Y, Xiang D, Zhang X, Yuan F. Autophagy regulates Endothelial-Mesenchymal transition by decreasing the phosphorylation level of Smad3. *BIOCHEM BIOPH RES CO* 2017 Jun 3;487(3):740-747.
93. Li J, Qian C, Zhou Q, Li J, Li K, Yi P. BEBT-908: A novel potent PI3K/HDAC inhibitor against diffuse large B-cell lymphoma. *BIOCHEM BIOPH RES CO* 2017 Sep 30;491(4):939-945.
94. Liu Y, Zhu H, Yan X, Gu H, Gu Z, Liu F. Endoplasmic reticulum stress participates in the progress of senescence and apoptosis of osteoarthritis chondrocytes. *BIOCHEM BIOPH RES CO* 2017 Sep 16;491(2):368-373.
95. Dong XL, Wu YF, Liu TH, Wang W, Pan CX, Adur M, Zhang MJ, Pan MH, Lu C. *Bombyx mori* protein BmREEPa and BmPtchd could form a complex with BmNPV envelope protein GP64. *BIOCHEM BIOPH RES CO* 2017 Sep 2;490(4):1254-1259.
96. Wang K, Li S, Worku T, Hao X, Yang L, Zhang S. Rab11a is required for porcine reproductive and respiratory syndrome virus induced autophagy to promote viral replication. *BIOCHEM BIOPH RES CO* 2017 Oct 14;492(2):236-242.
97. Wang Z, Dai Z, Pan Y, Wu S, Li Z, Zuo C. E3 ubiquitin ligase DTX4 is required for adipogenic differentiation in 3T3-L1 preadipocytes cell line. *BIOCHEM BIOPH RES CO* 2017 Oct 21;492(3):419-424.
98. He F, Ling L, Liao Y, Li S, Han W, Zhao B, Sun Y, Qiu HJ. Beta-actin interacts with the E2 protein and is involved in the early replication of classical swine fever virus. *Virus Res* 2014 Jan 22;179:161-8.
99. Zhang Z, Zhang S, Wang S. DNAzymes Dz13 target the c-jun possess antiviral activity against influenza A viruses. *MICROB PATHOGENESIS* 2017 Feb;103:155-161.
100. Zhang L, Jiang H, Gao X, Zou Y, Liu M, Liang Y, Yu Y, Zhu W, Chen H, Ge J. Heat shock transcription factor-1 inhibits H2O2-induced apoptosis via down-regulation of reactive oxygen species in cardiac myocytes. *Mol Cell Biochem* 2011 Jan;347(1-2):21-8.
101. Sun C, Ma P, Wang Y, Liu W, Chen Q, Pan Y, Zhao C, Qian Y, Liu J, Li

- W, Shu Y. KLF15 Inhibits Cell Proliferation in Gastric Cancer Cells via Up-Regulating CDKN1A/p21 and CDKN1C/p57 Expression. DIGEST DIS SCI 2017 Jun;62(6):1518-1526.
102. Wu J, Song R, Song W, Li Y, Zhang Q, Chen Y, Fu Y, Fang W, Wang J, Zhong Z, Ling H, Zhang L, Zhang F. Chlorpromazine protects against apoptosis induced by exogenous stimuli in the developing ratbrain. PLoS One 2011;6(7):e21966.
103. Yang T, Qiu H, Bao W, Li B, Lu C, Du G, Luo X, Wang L, Wan X. Epigenetic Inactivation of EFEMP1 Is Associated with Tumor Suppressive Function in Endometrial Carcinoma. PLoS One 2013 Jun 28;8(6):e67458.
104. Liu Z, He K, Ma Q, Yu Q, Liu C, Ndege I, Wang X, Yu Z. Autophagy inhibitor facilitates gefitinib sensitivity in vitro and in vivo by activating mitochondrialapoptosis in triple negative breast cancer. PLoS One 2017 May 22;12(5):e0177694.
105. Yin ZH, Jiang XW, Shi WB, Gui QL, Yu DF. Expression and Clinical Significance of ILF2 in Gastric Cancer. Dis Markers 2017;2017:4387081.
106. Jia P, Xu YJ, Zhang ZL, Li K, Li B, Zhang W, Yang H. Ferric ion could facilitate osteoclast differentiation and bone resorption through the production of reactive oxygen species. J Orthop Res 2012 Nov;30(11):1843-52.
107. Zhao L, Lin H, Chen S, Chen S, Cui M, Shi D, Wang B, Ma K, Shao Z. Hydrogen peroxide induces programmed necrosis in rat nucleus pulposus cells through the RIP1/RIP3-PARP-AIF pathway. J Orthop Res 2017 Sep 28.
108. Jiang S, Zu Y, Wang Z, Zhang Y, Fu Y. Involvement of mitochondrial permeability transition pore opening in 7-xylosyl-10-deacetylpaclitaxel-induced apoptosis. Planta Med 2011 Jul;77(10):1005-12.
109. Deng J, Huang Q, Wang F, Liu Y, Wang Z, Wang Z, Zhang Q, Lei B, Cheng Y. The role of caveolin-1 in blood-brain barrier disruption induced by focused ultrasound combinedwith microbubbles. J Mol Neurosci 2012 Mar;46(3):677-87.
110. Wang X, Chen J, Wang H, Yu H, Wang C, You J, Wang P, Feng C, Xu G, Wu X, Zhao R, Zhang G. Memantine Can Reduce Ethanol-Induced Caspase-3 Activity and Apoptosis in H4 Cells by Decreasing Intracellular Calcium. J Mol Neurosci 2017 Aug;62(3-4):402-411.
111. Wang J, Xiao B, Han F, Shi Y. Metformin Alleviated the Neuronal Oxidative Stress in Hippocampus of Rats under SingleProlonged Stress. J Mol Neurosci 2017 Sep;63(1):28-35.
112. Cheng Y, Diao DM, Zhang H, Song YC, Dang CX. Proliferation enhanced by NGF-NTRK1 signaling makes pancreatic cancer cells more sensitive to 2DG-inducedapoptosis. Int J Med Sci 2013;10(5):634-40.
113. Liu J, Yu L, Chen C, Zhou J, Gong X, Li D, Hou D, Song Y, Shao C. The Expression of Dectin-1, Irak1 and Rip2 During the Host Response to Aspergillus fumigatus. Mycopathologia 2018 Apr;183(2):337-348.
114. Wang J, Gong Y. Transcription of CYP19A1 is directly regulated by SF-1 in the theca cells of ovary follicles in chicken. GEN COMP ENDOCR 2017 Jun 1;247:1-7.
115. Lu T, Luo Y, Sun H, Qin W, Li Y. Electroacupuncture improves behavioral recovery and increases SCF/c-kit expression in a ratmodel of focal cerebral ischemia/reperfusion. Neurol Sci 2013 Apr;34(4):487-95.
116. Cai H, Yin D, Zhang L, Yang X, Xu X, Liu W, Zheng X, Zhang H, Wang J, Xu Y, Cheng D, Zheng M, Han Y, Wu M, Wang Y. Preparation and biological evaluation of 2-amino-6-[18F]fluoro-9-(4-hydroxy-3-hydroxy-methylbutyl) purine (6-[18F]FPCV) as a novel PET probe for imaging HSV1-tk reporter gene expression. Nucl Med Biol 2007 Aug;34(6):717-25.
117. Liang W, Zheng M, Bao C, Zhang Y. CSFV proliferation is associated with GBF1 and Rab2. J BIOSCI BIOENG 2017 Mar;42(1):43-56.
118. Zhang D, Jin T, Xu YQ, Lu Y, Wu Q, Zhang YK, Liu J. Diurnal-and sex-related difference of metallothionein expression in mice. J Circadian Rhythms 2012 Jul 24;10(1):5.
119. Liu S, Gao S, Wang XY, Wang DB. Expression of miR-126 and Crk in endometriosis: miR-126 may affect the progression ofendometriosis by regulating Crk expression. Arch Gynecol Obstet 2012 Apr;285(4):1065-72.
120. Huang Y, Qin J, Sun D, Jiang H, Zheng L, He Y, Gui L, Qian B, Zhang C, Luo M. Inhibition of soluble epoxide hydrolase reduces portal pressure by protecting mesenteric arterymyogenic responses in cirrhotic rats. PROSTAG OTH LIPID M 2017 Jul;131:17-24.
121. Gao Z, Chen X, Zhu K, Zeng P, Ding G. Dab1 Contributes to Angiotensin II-Induced Apoptosis via p38 Signaling Pathway in Podocytes. Biomed Res Int 2017;2017:2484303.
122. Ju L, Wu W, Yu M, Lou J, Wu H, Yin X, Jia Z, Xiao Y, Zhu L, Yang J. Different Cellular Response of Human Mesothelial Cell MeT-5A to Short-Term and Long-TermMultiwalled Carbon Nanotubes Exposure. Biomed Res Int 2017;2017:2747215.
123. Yin C, Zhou S, Jiang L, Sun X. Mechanical injured neurons stimulate astrocytes to express apolipoprotein E through ERKpathway. Neurosci Lett 2012 Apr 25;515(1):77-81.
124. Han X, Tang S, Dong L, Song L, Dong Y, Wang Y, Du Y. Loss of nitrergic and cholinergic neurons in the enteric nervous system of APP/PS1 transgenicmouse model. Neurosci Lett 2017 Mar 6;642:59-65.
125. Tian Y, Hu Y, Wang Z, Chen K, Zhang L, Wang L, Ren M, Huang A, Tang H. Hepatitis B virus regulates Raf1 expression in HepG2.2.15 cells by enhancing its promoter activity. Arch Virol 2011 May;156(5):869-74.
126. Hou T, Shi Y, Cheng S, Yang X, Li L, Xiao C. Nogo-A expresses on neural stem cell surface. Int J Neurosci 2010 Mar;120(3):201-5.
127. Qiu XH, Li F, Cao HQ, Shao JJ, Mei JG, Li HQ, Zhai YP. Activity of fibroblast growth factor receptor inhibitors TKI258, ponatinib and AZD4547 againstTPR FGFR1 fusion. Mol Med Rep 2017 Mar;15(3):1024-1030.
128. Ren A, Fu G, Qiu Y, Cui H. Leflunomide inhibits proliferation and tumorigenesis of oral squamous cell carcinoma. Mol Med Rep 2017 Dec;16(6):9125-9130.
129. Yu LN, Yu J, Zhang FJ, Yang MJ, Ding TT, Wang JK, He W, Fang T, Chen G, Yan M. Sevoflurane postconditioning reduces myocardial reperfusion injury in rat isolated hearts viaactivation of PI3K/Akt signaling and modulation of Bcl-2 family proteins. J ZHEJIANG UNIV-SC B 2010 Sep;11(9):661-72.
130. Wang W, Wang L, Li XX, Chen X, Zhang HY, He Y, Wang JJ, Zhao YY, Zhang BL, Xu YX. Effect of interrupted endogenous BMP/Smad signaling on growth and steroidogenesis of porcinegranulosa cells. J ZHEJIANG UNIV-SC B 2010 Sep;11(9):719-27.
131. Wang J, Huang H, Wang C, Liu X, Hu F, Liu M. MicroRNA-375 sensitizes tumour necrosis factor-alpha (TNF- α)-induced apoptosis in head and neck squamouscell carcinoma in vitro. INT J ORAL MAX SURG 2013 Aug;42(8):949-55.
132. Wang J, Huang J, Wang L, Chen C, Yang D, Jin M, Bai C, Song Y. Urban particulate matter triggers lung inflammation via the ROS-MAPK-NF- κ B signaling pathway. J Thorac Dis 2017 Nov;9(11):4398-4412.

- 133.Tan L, Meng L, Shi X, Yu B. Knockdown of microRNA-17-5p ameliorates atherosclerotic lesions in ApoE-/- mice and restores the expression of very low density lipoprotein receptor. *Biotechnol Lett* 2017 Jul;39(7):967-976.
- 134.Liang W, Zhou X, Yao L, Liu B. Cryopreservation-Altered Expression of RNA and Protein Markers in Biological Specimens. *Biopreserv Biobank* 2017 Jun;15(3):176-181.
- 135.Chen X, Gao YD, Yang J. Elevated interferon regulatory factor 4 levels in patients with allergic asthma. *J Asthma* 2012 Jun;49(5):441-9.
- 136.Ding S, Peng H, Fang HS, Zhou JL, Wang Z. Pulsed electromagnetic fields stimulation prevents steroid-induced osteonecrosis in rats. *BMC MUSCULOSKEL DIS* 2011 Sep 29;12:215.
- 137.Du YF, Liang L, Shi Y, Long QZ, Zeng J, Wang XY, He DL. Multi-target siRNA based on DNMT3A/B homologous conserved region influences cell cycle and apoptosis of human prostate cancer cell line TSU-PR1. *Genet Mol Biol* 2012 Jan;35(1):164-71.
- 138.Chen Q, Zhan Q, Li Y, Sun S, Zhao L, Zhang H, Zhang G. Schisandra Lignan Extract Protects against Carbon Tetrachloride-Induced Liver Injury in Mice by Inhibiting Oxidative Stress and Regulating the NF- κ B and JNK Signaling Pathways. *EVID-BASED COMPL ALT* 2017;2017:5140297.
- 139.Zhou D, Wang J, He LN, Li BH, Ding YN, Chen YW, Fan JG. Prolyl oligopeptidase attenuates hepatic stellate cell activation through induction of Smad7 and PPAR- γ . *Exp Ther Med* 2017 Feb;13(2):780-786.
- 140.Zhu Z, Yi S, Shan Z, Guo H, Ke S. Effect of isoflurane + N2O inhalation and propofol + fentanyl anesthesia on myocardial function as assessed by cardiac troponin, caspase-3, cyclooxygenase-2 and inducible nitric oxide synthase expression. *Exp Ther Med* 2017 Nov;14(5):4377-4382.
- 141.Hu LF, Qian AQ, WangY, Di SM, Shang P. Inhibitory Effect of Simulated Microgravity on Differentiating Preosteoblasts. *Advances in Space Research* 2013 Jan 1;51(1):107-114.
- 142.Pan L, Liu C, Kong Y, Piao Z, Cheng B. Phentolamine inhibits angiogenesis in vitro: Suppression of proliferation migration and differentiation of human endothelial cells. *CLIN HEMORHEOL MICRO* 2017;65(1):31-41.
- 143.Wang Y, Li XW, Liu J, Fu W. Antenatal taurine supplementation in fetal rats with growth restriction improves neural stem cellproliferation by inhibiting the activities of Rho family factors. *J MATERN-FETAL NEO M* 2018 Jun;31(11):1454-1461.
- 144.Wang J, Zhao Y, Gu K, Yu P, Zhang B, Wang W, Yang J, Xu Y. The novel porcine gene early growth response 4 (Egr4) is differentially expressed in the ovaries of Erhualian and Pietrain pigs. *REPROD FERT DEVELOP* 2014;26(4):587-98.
- 145.Bai WJ, Jin PJ, Kuang MQ, Wei QW, Shi FX, Davis JS, Mao DG. Temporal regulation of extracellular signal-regulated kinase 1/2 phosphorylation, heat shockprotein 70 and activating transcription factor 3 during prostaglandin F-induced luteal regression in pseudopregnant rats following heat stress. *REPROD FERT DEVELOP* 2017 Jun;29(6):1184-1193.
- 146.Li R, Zhang J, Zhang L, Cui Q, Liu H. Angelica injection promotes peripheral nerve structure and function recovery with increasedexpressions of nerve growth factor and brain derived neurotrophic factor in diabetic rats. *Curr Neurovasc Res* 2010 Aug;7(3):213-22.
- 147.Xu XY, Shi Y, Zhang PP, Zhang F, Shen YY, Su X, Zhao BL. E-cadherin mediates adhesion and endocytosis of Aspergillus fumigatus blastospores in humanepithelial cells. *CHINESE MED J-PEKING* 2012 Feb;125(4):617-21.
- 148.Xu X, Lv H, Li X, Su H, Zhang X, Yang J. Danshen attenuates cartilage injuries in osteoarthritis in vivo and in vitro by activatingJAK2/STAT3 and AKT pathways. *EXP ANIM TOKYO* 2017 Oct 31.
- 149.Liu Y, Pan J, Liu L, Li W, Tao R, Chen Y, Li H, Shang S. The influence of HCMV infection on autophagy in THP-1 cells. *MEDICINE* 2017 Nov;96(44):e8298.
- 150.Wang X, Yang Q, Wang P, Luo L, Chen Z, Liao B, Li G. Derp2-mutant gene vaccine inhibits airway inflammation and up-regulates Toll-like receptor 9 in anallergic asthmatic mouse model. *ASIAN PAC J ALLERGY* 2010 Dec;28(4):287-93.
- 151.Wang Y, Song X, Yue X, Su H, Gu Y, Bowman L, Ding M, Zou B, Zhao J, Lin X. Protection by nitrite against the ischemic effects induced by acute myocardial infarction in mice. *Anatol J Cardiol* 2017 Nov;18(5):315-320.
- 152.Zhang JQ, Zhao XK, He J, Zhu L, Wang XJ. Express and role of FGFR2 in bladder transitional cell carcinoma. 《中国医学工程》 2007 Sep;15(9):720-25.

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