



碧云天网站



微信公众号

碧云天生物技术/Beyotime Biotechnology

订货热线: 400-168-3301或800-8283301

订货e-mail: order@beyotime.com

技术咨询: info@beyotime.com

网址: http://www.beyotime.com

SB203580 (p38 MAPK抑制剂)

产品编号	产品名称	包装
S1863-1mg	SB203580 (p38 MAPK抑制剂)	20mg/ml×0.05ml
S1863-5mg	SB203580 (p38 MAPK抑制剂)	5mg
S1863-25mg	SB203580 (p38 MAPK抑制剂)	25mg
S1863-100mg	SB203580 (p38 MAPK抑制剂)	100mg

产品简介:

- SB203580也写作SB 203580或SB-203580, 是一种常用的p38 MAPK抑制剂。SB203580可以通透细胞, 抑制p38 MAPK (p38 MAP kinase), 抑制后续MAPKAP Kinase-2和MAPKAP Kinase-3的激活。通过抑制p38 MAPK, SB203580可以有效抑制一些炎症因子(如IL-1 β 、TNF- α)诱导的部分信号转导。SB203580选择性抑制p38 MAPK, IC₅₀为600 nM; 对于JNK/SAPK和p44/42 MAPK (即Erk1/2)无显著的抑制作用, IC₅₀仅为100 μ M。
- SB203580分子量为377.43, 分子式为C₂₁H₁₆N₃FOS, CAS Number: 152121-47-6。本产品纯度大于99%。
- 本SB203580为进口分装, 其中20mg/ml包装产品用DMSO配制, 共0.05ml。5mg, 25mg和100mg包装为粉末装。

包装清单:

产品编号	产品名称	包装
S1863-1mg	SB203580 (p38 MAPK抑制剂)	20mg/ml×0.05ml
S1863-5mg	SB203580 (p38 MAPK抑制剂)	5mg
S1863-25mg	SB203580 (p38 MAPK抑制剂)	25mg
S1863-100mg	SB203580 (p38 MAPK抑制剂)	100mg
—	说明书	1份

保存条件:

-20°C避光保存, 一年有效。

注意事项:

- 本产品对人体有刺激性, 操作时请小心, 并注意适当防护以避免直接接触人体或吸入体内。
- 本SB203580在4°C、冰浴等较低温度情况下会凝固而粘在离心管管底、管壁或管盖内, 可以20-25°C水浴温育片刻至全部融解后使用。
- 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. SB203580常见使用浓度范围为1-50 μ M。具体的最佳工作浓度请参考相关文献, 或根据实验目的, 以及所培养的特定细胞和组织, 通过实验进行摸索和优化。

使用本产品的文献:

1. Shi X, Zhou B. The role of Nrf2 and MAPK pathways in PFOS-induced oxidative stress in zebrafish embryos. *Toxicol Sci.* 2010;115(2):391-400.
2. Jiang Z, Li S, Liu Y, Deng P, Huang J, He G. Sesamin induces melanogenesis by microphthalmia-associated transcription factor and tyrosinase up-regulation via cAMP signaling pathway. *Acta Biochim Biophys Sin (Shanghai).* 2011 Oct;43(10):763-70.
3. Jin W, Li Q, Lin Y, Lu Y, Li H, Wang L, Hu R, Ma L, Wang J, Pang T. Reversal of Imatinib resistance in BCR-ABL-positive leukemia after inhibition of the Na⁺/H⁺-exchanger. *Cancer Lett.* 2011 Sep 1; 308(1):81-90.
4. Gong J, Shen XH, Chen C, Qiu H, Yang RG. Down-regulation of HIV-1 infection by inhibition of the MAPK signaling pathway. *Viroi Sin.* 2011 Apr;26(2):114-22.
5. Lin M, Wang X, Zhu J, Fan D, Zhang Y, Zhang J, Guo Z. Cellular and biomolecular responses of human ovarian cancer cells to cytostatic dinuclear platinum(II) complexes. *Apoptosis.* 2011 Mar;16(3):288-300.
6. Li W, Liu Y, Li XX, Yu Y, Wu JJ, Wang Q, Huo H, Wang LM, Yang L. MAPKs are not involved in triptolide-induced cell growth inhibition and apoptosis in prostate cancer cell lines with different p53 status. *Planta Med.* 2011 Jan;77(1):27-31.
7. Feng J, Zhang P, Chen X, He G. PI3K and ERK/Nrf2 pathways are involved in oleanolic acid-induced heme oxygenase-1 expression in rat vascular smooth muscle cells. *J Cell Biochem.* 2011 Jun;112(6):1524-31.
8. Sun C, Wang L, Yan J, Liu S. Calcium ameliorates obesity induced by high-fat diet and its potential correlation with p38 MAPK pathway. *Mol Biol Rep.* 2012 Feb;39(2):1755-63.
9. Zhu F, Shen F, Fan Y, Xie Y, Xia Y, Kong Y. Osteopontin increases the expression of β 1, 4-Galactosyltransferase-I and promotes adhesion in human RL95-2 cells. *Glycoconj J.* 2012 Aug;29(5-6):347-56.
10. Fang S, Jin Y, Zheng H, Yan J, Cui Y, Bi H, Jia H, Zhang H, Wang Y, Na L, Gao X, Zhou H. High glucose condition upregulated Txnip expression level in rat mesangial cells through ROS/MEK/MAPK pathway. *Mol Cell Biochem.* 2011 Jan;347(1-2):175-82.

- Wang RJ, Li QH, Pang TX. Neutrophil gelatinase-associated lipocalin regulates intracellular accumulation of Rh123 in cancer cells. *Genes Cells*. 2012 Mar;17(3):205-17.
11. Guo C, Yuan H, He Z. Melamine causes apoptosis of rat kidney epithelial cell line (NRK-52e cells) via excessive intracellular ROS (reactive oxygen species) and the activation of p38 MAPK pathway. *Cell Biol Int*. 2012 Apr 1;36(4):383-9.
 12. Sun C, Qi R, Wang L, Yan J, Wang Y. p38 MAPK regulates calcium signal-mediated lipid accumulation through changing VDR expression in primary preadipocytes of mice. *Mol Biol Rep*. 2012 Mar;39(3):3179-84.
 13. Teng M, Jiang XP, Zhang Q, Zhang JP, Zhang DX, Liang GP, Huang YS. Microtubular stability affects pVHL-mediated regulation of HIF-1 α via the p38/MAPK pathway in hypoxic cardiomyocytes. *PLoS One*. 2012;7(4):e35017.
 14. Zhong Y, Liu T, Guo Z. Curcumin inhibits ox-LDL-induced MCP-1 expression by suppressing the p38MAPK and NF- κ B pathways in rat vascular smooth muscle cells. *Inflamm Res*. 2012 Jan;61(1):61-7.
 15. Zhong Y, Liu T, Lai W, Tan Y, Tian D, Guo Z. Heme oxygenase-1-mediated reactive oxygen species reduction is involved in the inhibitory effect of curcumin on lipopolysaccharide-induced monocyte chemo attractant protein-1 production in RAW264.7 macrophages. *Mol Med Rep*. 2013 Jan;7(1):242-6.
 16. Xu S, Wen H, Jiang H. Urotensin II promotes the proliferation of endothelial progenitor cells through p38 and p44/42 MAPK activation. *Mol Med Rep*. 2012 Jul;6(1):197-200.
 17. Wu F, Wang Z, Gu JH, Ge JB, Liang ZQ, Qin ZH. p38MAPK/p53-Mediated Bax induction contributes to neurons degeneration in rotenone-induced cellular and rat models of Parkinson's disease. *Neurochem Int*. 2013 May 25;63(3):133-140.
 18. Gao Y, Wang S, Liu B, Zhong L. Roles of GINS2 in K562 human chronic myelogenous leukemia and NB4 acute promyelocytic leukemia cells. *Int J Mol Med*. 2013 Jun;31(6):1402-10.
 19. Xiong Z, Wang Y, Gong W, Zhou Z, Lu G. Expression of Hsp27 correlated with rat detrusor contraction after acute urinary retention. *Mol Cell Biochem*. 2013 Sep;381(1-2):257-65.
 20. Ding ZY, Jin GN, Liang HF, Wang W, Chen WX, Datta PK, Zhang MZ, Zhang B, Chen XP. Transforming growth factor β induces expression of connective tissue growth factor in hepatic progenitor cells through Smad independent signaling. *Cell Signal*. 2013 May 28;25(10):1981-92.
 21. Yongjun Y, Shuyun H, Lei C, Xiangrong C, Zhilin Y, Yiqun K. Atorvastatin suppresses glioma invasion and migration by reducing microglial MT1-MMP expression. *J Neuroimmunol*. 2013 Jul 15;260(1-2):1-8.
 22. Hu X, Wang H, Liu J, Fang X, Tao K, Wang Y, Li N, Shi J, Wang Y, Ji P, Cai W, Bai X, Zhu X, Han J, Hu D. The role of ERK and JNK signaling in connective tissue growth factor induced extracellular matrix protein production and scar formation. *Arch Dermatol Res*. 2013 Jul;305(5):433-45.
 23. Zhao L, Zhang W, Chen M, Zhang J, Zhang M, Dai K. Aspirin Induces platelet apoptosis. *Platelets*. 2013;24(8):637-42.
 24. Lv C, Sun W, Sun H, Wei S, Chen R, Wang B, Huang C. Asperolide A, a marine-derived tetranortriterpenoid, induces G2/M arrest in human NCI-H460 lung carcinoma cells, is mediated by p53-p21 stabilization and modulated by Ras/Raf/MEK/ERK signaling pathway. *Mar Drugs*. 2013 Jan 29;11(2):316-31.
 25. Deng X, Rui W, Zhang F, Ding W. PM2.5 induces Nrf2-mediated defense mechanisms against oxidative stress by activating PI3K/AKT signaling pathway in human lung alveolar epithelial A549 cells. *Cell Biol Toxicol*. 2013 Jun;29(3):143-57.
 26. Xi MY, Sun ZY, Sun HP, Jia JM, Jiang ZY, Tao L, Ye M, Yang X, Wang YJ, Xue X, Huang JJ, Gao Y, Guo XK, Zhang SL, Yang YR, Guo QL, Hu R, You QD. Synthesis and bioevaluation of a series of α -pyrone derivatives as potent activators of Nrf2/ARE pathway (part I). *Eur J Med Chem*. 2013 Jun 14;66C:364-371.
 27. Li B, Dong Z, Liu H, Xia YF, Liu XM, Luo BB, Wang WK, Li B, Gao F, Zhang C, Zhang MX, Zhang Y, An FS. Serum amyloid A stimulates lipoprotein-associated phospholipase A2 expression in vitro and in vivo. *Atherosclerosis*. 2013 Jun;228(2):370-9.
 28. Li HJ, Guo LM, Yang LL, Zhou YC, Zhang YJ, Guo J, Xie XJ, Guo GZ. Electromagnetic-pulse-induced activation of p38 MAPK pathway and disruption of blood-retinal barrier. *Toxicol Lett*. 2013 Jun 20;220(1):35-43.
 29. Ren P, Sun D, Xin D, Ma W, Chen P, Gao H, Zhang S, Gong M. Serum amyloid A promotes osteosarcoma invasion via upregulating α v β 3 integrin. *Mol Med Rep*. 2014 Dec;10(6):3106-12.
 30. Jiang S, Zhao L, Lu Y, Wang M, Chen Y, Tao D, Liu Y, Sun H, Zhang S, Ma Y. Piv12 inhibits keratin 8 degradation through promoting p38-induced phosphorylation to resist Fas-mediated apoptosis. *Mol Cell Biol*. 2014 Nov;34(21):3928-38.
 31. Jiao ZH, Li M, Feng YX, Shi JC, Zhang J, Shao B. Hormesis effects of silver nanoparticles at non-cytotoxic doses to human hepatoma cells. *PLoS One*. 2014 Jul 17;9(7):e102564.
 32. Shen J, Xie Y, Sun ML, Han R, Qin ZH, He JK. Antitumor activity of cobrotoxin in human lung adenocarcinoma A549 cells and following transplantation in nude mice. *Oncol Lett*. 2014 Nov;8(5):1961-5.
 33. Shen YJ, Zhu XX, Yang X, Jin B, Lu JJ, Ding B, Ding ZS, Chen SH. Cardamonin inhibits angiotensin II-induced vascular smooth muscle cell proliferation and migration by downregulating p38 MAPK, Akt, and ERK phosphorylation. *J Nat Med*. 2014 Jul;68(3):623-9.
 34. Jin C, Guo J, Qiu X, Ma K, Xiang M, Zhu X, Guo J. IGF-1 induces iNOS expression via the p38 MAPK signal pathway in the anti-apoptotic process in pulmonary artery smooth muscle cells during PAH. *J Recept Signal Transduct Res*. 2014 Aug;34(4):325-31.
 35. Jiang G, Wu H, Hu Y, Li J, Li Q. Gastrodin inhibits glutamate-induced apoptosis of PC12 cells via inhibition of CaMKII/ASK-1/p38 MAPK/p53 signaling cascade. *Cell Mol Neurobiol*. 2014 May;34(4):591-602.
 36. Liu X, Gao Y, Yao H, Zhou L, Pei J, Sun L, Wang J, Sun D. p38 and extracellular signal-regulated kinases activations have opposite effects on primary-cultured rat cerebellar granule neurons exposed to sodium arsenite. *J Biochem Mol Toxicol*. 2014 Apr;28(4):143-8.
 37. Du XH, Zhou XL, Cao R, Xiao P, Teng Y, Ning CB, Liu HL. FSH-induced p38-MAPK-mediated dephosphorylation at serine 727 of the signal transducer and activator of transcription 1 decreases Cyp1b1 expression in mouse granulosa cells. *Cell Signal*. 2015 Jan;27(1):6-14.
 38. Hu J, Li Z, Xu LT, Sun AJ, Fu XY, Zhang L, Jing LL, Lu AD, Dong YF, Jia ZP. Protective Effect of Apigenin on Ischemia/Reperfusion Injury of the Isolated Rat Heart. *Cardiovasc Toxicol*. 2015 Jul;15(3):241-9.
 39. Ding W, Jiang Y, Jiang Y, Zhu T, Xu Y, Jiang W, Zhu W, Tang Z, Ge Z, Ma T, Tan Y. Role of SB203580 in the regulation of human esophageal cancer cells under the effect of Diosgenin. *Int J Clin Exp Med*. 2015 Feb 15;8(2):2476-9.
 40. Wu F, Wang HY, Cai F, Wang LJ, Zhang FR, Chen XN, Yang Q, Jiang MH, Wang XF, Shen WF. Valsartan decreases platelet activity and arterial thrombotic events in elderly patients with hypertension. *Chin Med J (Engl)*. 2015 Jan 20;128(2):153-8.
 41. Wang X, Shi L, Deng Y, Qu M, Mao S, Xu L, Xu W, Fang C. Inhibition of leucine aminopeptidase 3 suppresses invasion of ovarian cancer cells through down-regulation of fascin and MMP-2/9. *Eur J Pharmacol*. 2015 Dec 5;768:116-22.
 42. Lin D, Li L, Sun Y, Wang W, Wang X, Ye Y, Chen X, Xu Y. IL-17 regulates the expressions of RANKL and OPG in human periodontal ligament cells via TRAF6/TBK1-JNK/NF- κ B pathways. *Immunology*. 2014 Sep 29. Interleukin-17 regulates the expressions of RANKL and OPG in human periodontal ligament cells via TRAF6/TBK1 - JNK/NF- κ B pathways. 2015 Mar; 144(3):472-85.
 43. Song Z, Deng X, Chen W, Xu J, Chen S, Zhong H, Hao F. Toll-like receptor 2 agonist Pam3CSK4 up-regulates Fc ϵ RI receptor expression on monocytes from patients with severe extrinsic atopic dermatitis. *J Eur Acad Dermatol Venereol*. 2015 Nov;29(11):2169-76.
 44. Zhu W, Jiang C, Xu J, Geng M, Wu X, Sun J, Ma J, Holmdahl R, Meng L, Lu S. Pristane primed rat T cells enhance TLR3 expression of fibroblast-like synoviocytes via TNF- α initiated p38 MAPK and NF- κ B pathways. *Clin Immunol*. 2015 Feb;156(2):141-53.
 45. Bian Y, Ren L, Wang L, Xu S, Tao J, Zhang X, Huang Y, Qian Y, Zhang X, Song Z, Wu W, Wang Y, Liang G. A novel imidazopyridine derivative, X2, prevents the retinal ischemia-reperfusion injury via inhibition of MAPKs. *Exp Eye Res*. 2015 Jun;135:26-36.
 46. Chen J, Jiang L, Lan K, Chen X. Celecoxib Inhibits the Lytic Activation of Kaposi's Sarcoma-Associated Herpesvirus through Down-Regulation of RTA Expression by Inhibiting the Activation of p38 MAPK. *Viruses*. 2015 May 5;7(5):2268-87.
 47. Li DD, Pang HG, Song JN, Huang H, Zhang M, Zhao YL, Sun P, Zhang BF, Ma XD. The rapid lipopolysaccharide-induced release of matrix metalloproteinases 9 is suppressed by simvastatin. *Cell Biol Int*. 2015 Jul;39(7):788-98.

48. Mao Y, Wang B, Xu X, Du W, Li W, Wang Y. Glycyrrhizic Acid Promotes M1 Macrophage Polarization in Murine Bone Marrow-Derived Macrophages Associated with the Activation of JNK and NF- κ B. *Mediators Inflamm*. 2015;2015:372931.
49. Guo L, Wang T, Wu Y, Yuan Z, Dong J, Li X, An J, Liao Z, Zhang X, Xu D, Wen FQ. WNT/ β -catenin signaling regulates cigarette smoke-induced airway inflammation via the PPAR δ /p38 pathway. *Lab Invest*. 2016 Feb;96:218-29.
50. Guan J, Du S, Lv T, Qu S, Fu Q, Yuan Y. Oxygen-glucose Deprivation Preconditioning Protects Neurons against Oxygen-glucose Deprivation/reperfusion Induced Injury via Bone Morphogenetic Protein-7 Mediated ERK, p38 and Smad Signaling Pathways. *Clin Exp Pharmacol Physiol*. 2016 Jan;43(1):125-34.
51. Tang J, Zhan L, Qin C. Inhibition of TLR8 Mediated Signaling Promotes BCG Induced Apoptosis in THP-1 Cells. *Microb Pathog*. 2016 Apr;78-82.
52. Qin Z, Feng J, Liu Y, Deng LL, Lu C. PDGF-D promotes dermal fibroblast invasion in 3-dimensional extracellular matrix via Snail-mediated MT1-MMP upregulation. *Tumour Biol*. 2016 Jan;37(1):591-9.
53. Hatipoglu I, Ercan D, Acilan C, Basalp A, Durali D, Baykal AT. Hepatitis B virus e antigen (HBeAg) may have a negative effect on dendritic cell generation. *Immunobiology*. 2014 Dec;219(12):944-9.
54. Deng W, Zhang Y, Gu L, Cui J, Duan B, Wang Y, Du J. Heat shock protein 27 downstream of P38-PI3K/Akt signaling antagonizes melatonin-induced apoptosis ofSGC-7901 gastric cancer cells. *Cancer Cell Int*. 2016 Feb 12;16:5.
55. Xue LX, Xu ZH, Wang JQ, Cui Y, Liu HY, Liang WZ, Ji QY, He JT, Shao YK, Mang J, Xu ZX. Activin A/Smads signaling pathway negatively regulates Oxygen Glucose Deprivation-induced autophagy via suppression of JNK and p38 MAPK pathways in neuronal PC12 cells. *Biochem Biophys Res Commun*. 2016 Nov 18;480(3):355-361.
56. Wang Y, Cui R, Zhang X, Qiao Y, Liu X, Chang Y, Yu Y, Sun F, Wang J. SIRT1 increases YAP- and MKK3-dependent p38 phosphorylation in mouse liver and human hepatocellular carcinoma. *Oncotarget*. 2016 Mar 8;7(10):11284-98.
57. Bai JA, Jie H, Wei S, Wang S, Guo H, Tang Q. GART mediates the renewal of intestinal epithelial barrier via p38/p53/PUMA cascade in colitis. *Apoptosis*. 2016 Dec;21(12):1386-1397.
58. Guan J, Du S, Lv T, Qu S, Fu Q, Yuan Y. Oxygen-glucose deprivation preconditioning protects neurons against oxygen-glucose deprivation/reperfusion induced injury via bone morphogenetic protein-7 mediated ERK, p38 and Smad signalling pathways. *Clin Exp Pharmacol Physiol*. 2016 Jan;43(1):125-34.
59. Guo L, Wang T, Wu Y, Yuan Z, Dong J, Li X, An J, Liao Z, Zhang X, Xu D, Wen FQ. WNT/ β -catenin signaling regulates cigarette smoke-induced airway inflammation via the PPAR δ /p38 pathway. *Lab Invest*. 2016 Feb;96(2):218-29.
60. Tang J, Zhan L, Qin C. Inhibition of TLR8 mediated signaling promotes BCG induced apoptosis in THP-1 cells. *Microb Pathog*. 2016 Apr;93:78-82.
61. Lin X, Wu S, Wang Q, Shi Y, Liu G, Zhi J, Wang F. Saikosaponin-D Reduces H₂O₂-Induced PC12 Cell Apoptosis by Removing ROS and Blocking MAPK-Dependent Oxidative Damage. *Cell Mol Neurobiol*. 2016 Nov;36(8):1365-1375.
62. Chen T, Wang Q, Li Y, Huang H, Hu W. Chinese herbal formula QHF inhibits liver cancer cell invasion and migration. *Exp Ther Med*. 2016 Jun;11(6):2413-2419.
63. Zhang M, Gu J, Zhang C. Hepatitis B virus X protein binding to hepsin promotes C3 production by inducing IL-6 secretion from hepatocytes. *Oncotarget*. 2016 Feb 16;7(7):7780-800.
64. Zhu J, Zheng Y, Zhang H, Sun H. Targeting cancer cell metabolism: The combination of metformin and 2-Deoxyglucose regulates apoptosis in ovarian cancer cells via p38 MAPK/JNK signaling pathway. *Am J Transl Res*. 2016 Nov 15;8(11):4812-4821.
65. Cheng X, He S, Yuan J, Miao S, Gao H, Zhang J, Li Y, Peng W, Wu P. Lipoxin A4 attenuates LPS-induced mouse acute lung injury via Nrf2-mediated E-cadherin expression in airway epithelial cells. *Free Radic Biol Med*. 2016 Apr;93:52-66.
66. Zhang YQ, Hu SY, Chen YD, Guo MZ, Wang S. Hepatocyte growth factor inhibits hypoxia/reoxygenation-induced activation of xanthine oxidase in endothelial cells through the JAK2 signaling pathway. *Int J Mol Med*. 2016 Oct;38(4):1055-62.
67. Wang Y, Cao J, Fan Y, Xie Y, Xu Z, Yin Z, Gao L, Wang C. Artemisinin inhibits monocyte adhesion to HUVECs through the NF- κ B and MAPK pathways in vitro. *Int J Mol Med*. 2016 Jun;37(6):1567-75.
68. Li Z, Wang S, Zhao W, Sun Z, Yan H, Zhu J. Oxidized low-density lipoprotein upregulates microRNA-146a via JNK and NF- κ B signaling. *Mol Med Rep*. 2016 Feb;13(2):1709-16.
69. Qian T, Wang K, Cui J, He Y, Yang Z. Angiopoietin-Like Protein 7 Promotes an Inflammatory Phenotype in RAW264.7 Macrophages Through the P38 MAPK Signaling Pathway. *Inflammation*. 2016 Jun;39(3):974-85.
70. Yue X, Wu M, Jiang H, Hao J, Zhao Q, Zhu Q, Saren G, Zhang Y, Zhang X. Endothelial lipase is upregulated by interleukin-6 partly via the p38 MAPK and p65 NF- κ B signaling pathways. *Mol Med Rep*. 2016 Sep;14(3):1979-85.
71. Pan C, Xing JH, Zhang C, Zhang YM, Zhang LT, Wei SJ, Zhang MX, Wang XP, Yuan QH, Xue L, Wang JL, Cui ZQ, Zhang Y, Xu F, Chen YG. Aldehyde dehydrogenase 2 inhibits inflammatory response and regulates atherosclerotic plaque. *Oncotarget*. 2016 Jun 14;7(24):35562-35576.
72. Qin Z, Feng J, Liu Y, Deng LL, Lu C. PDGF-D promotes dermal fibroblast invasion in 3-dimensional extracellular matrix via Snail-mediated MT1-MMP upregulation. *Tumour Biol*. 2016 Jan;37(1):591-9.
73. Wang Z, Huang H, He W, Kong B, Hu H, Fan Y, Liao J, Wang L, Mei Y, Liu W, Xiong X, Peng J, Xiao Y, Huang D, Quan D, Li Q, Xiong L, Zhong P, Wang G. Regulator of G-protein signaling 5 protects cardiomyocytes against apoptosis during in vitro cardiocirculatory reperfusion in mice by inhibiting both JNK1/2 and P38 signaling pathways. *Biochem Biophys Res Commun*. 2016 Apr 29;473(2):551-7.
74. Su J, Zhou H, Liu X, Nilsson J, Fredrikson GN, Zhao M. oxLDL antibody inhibits MCP-1 release in monocytes/macrophages by regulating Ca²⁺/K⁺ channel flow. *J Cell Mol Med*. 2016 Dec 20. doi: 10.1111/jcmm.13033. [Epub ahead of print]
75. Shen XF, Teng Y, Sha KH, Wang XY, Yang XL, Guo XJ, Ren LB, Wang XY, Li J, Huang N. Dietary flavonoid luteolin attenuates uropathogenic Escherichia. Coli invasion of the urinary bladder. *Biofactors*. 2016 Nov 12;42(6):674-685.
76. Jiang Z, Hua Y. Hydrogen sulfide promotes osteogenic differentiation of human periodontal ligament cells via p38-MAPK signaling pathway under proper tension stimulation. *Arch Oral Biol*. 2016 Dec;72:8-13.
77. Zhang C, Jia X, Bao J, Chen S, Wang K, Zhang Y, Li P, Wan JB, Su H, Wang Y, Mei Z, He C. Polyphyllin VII induces apoptosis in HepG2 cells through ROS-mediated mitochondrial dysfunction and MAPK pathways. *BMC Complement Altern Med*. 2016 Feb 9;16:58.
78. Li Y, Zhang W, Gao J, Liu J, Wang H, Li J, Yang X, He T, Guan H, Zheng Z, Han S, Dong M, Han J, Shi J, Hu D. Adipose tissue-derived stem cells suppress hypertrophic scar fibrosis via the p38/MAPK signaling pathway. *Stem Cell Res Ther*. 2016 Aug 2;7(1):102.
79. Lv M, Xia YF, Li B, Liu H, Pan JY, Li BB, Zhang C, An FS. Serum amyloid A stimulates vascular endothelial growth factor receptor 2 expression and angiogenesis. *J Physiol Biochem*. 2016 Mar;72(1):71-81.
80. Zhao YR, Wang D, Liu Y, Shan L, Zhou JL. The PI3K/Akt, p38MAPK, and JAK2/STAT3 signaling pathways mediate the protection of SO₂ against acute lung injury induced by limb ischemia/reperfusion in rats. *J Physiol Sci*. 2016 May;66(3):229-39.
81. Guo C, Yang L, Wan CX, Xia YZ, Zhang C, Chen MH, Wang ZD, Li ZR, Li XM, Geng YD, Kong LY. Anti-neuroinflammatory effect of Sophoraflavanone G from Sophora alopecuroides in LPS-activated BV2 microglia by MAPK, JAK/STAT and Nrf2/HO-1 signaling pathways. *Phytomedicine*. 2016 Dec 1;23(13):1629-1637.
82. Zhao J, Ma J, Lu J, Jiang Y, Zhang Y, Zhang X, Zhao J, Yang H, Huang Y, Zhao M, Liu K, Dong Z. Involvement of p38MAPK-ATF2 signaling pathway in alternariol induced DNA polymerase β expression. *Oncol Lett*. 2016 Jul;12(1):675-679.
83. Shi M, Ren X, Wang X, Wang H, Liu G, Yuan X, Zheng S, Yu L, Pan S, Song G, Guo Q, Li L, Zhang X, Zhang Z, Ding H, Jiang G. A novel combination of oridonin and valproic acid in enhancement of apoptosis induction of HL-60 leukemia cells. *Int J Oncol*. 2016 Feb;48(2):734-46.
84. Rui W, Guan L, Zhang F, Zhang W, Ding W. PM2.5-induced oxidative stress increases adhesion molecules expression in human endothelial cells through the ERK/AKT/NF- κ B-dependent pathway. *J Appl Toxicol*. 2016 Jan;36(1):48-59.
85. Zhou Y, Zhang S, Deng S, Dai C, Tang S, Yang X, Li D, Zhao K, Xiao X. ML-7 amplifies the quercetin-induced cell death through akt and MAPK-mediated apoptosis on HepG2 cell line. *Toxicol Mech Methods*.

2016;26(1):11-21.

86. Cheng R, Li D, Shi X, Gao Q, Wei C, Li X, Li Y, Zhou H. Reduced CX3CL1 Secretion Contributes to the Susceptibility of Oral Leukoplakia-Associated Fibroblasts to *Candida albicans*. *Front Cell Infect Microbiol*. 2016 Nov 11;6:150.
87. He LX, Tong X, Zeng J, Tu Y, Wu S, Li M, Deng H, Zhu M, Li X, Nie H, Yang L, Huang F. Paeonol Suppresses Neuroinflammatory Responses in LPS-Activated Microglia Cells. *Inflammation*. 2016 Dec; 39(6):1904-1917.
88. Zhu Y, Jiang Y, Shi L, Du L, Xu X, Wang E, Sun Y, Guo X, Zou B, Wang H, Wang C, Sun L, Zhen Y. 7-O-Geranylquercetin induces apoptosis in gastric cancer cells via ROS-MAPK mediated mitochondrial signaling pathway activation. *Biomed Pharmacother*. 2017 Jan 8;87:527-538.
89. Su AR, Qiu M, Li YL, Xu WT, Song SW, Wang XH, Song HY, Zheng N, Wu ZW. BX-795 inhibits HSV-1 and HSV-2 replication in a JNK/p38-dependent manner without interfering with PDK1 activity. *Acta Pharmacol Sin*. 2017 Jan 23. doi: 10.1038/aps.2016.160. [Epub ahead of print]
90. Sun HY, Hu KZ, Yin ZS. Inhibition of the p38-MAPK signaling pathway suppresses the apoptosis and expression of proinflammatory cytokines in human osteoarthritis chondrocytes. *Cytokine*. 2017 Feb;90:135-143.
91. Qu T, Wang E, Jin B, Li W, Liu R, Zhao ZB. 5-Aminosalicylic acid inhibits inflammatory responses by suppressing JNK and p38 activity in murine macrophages. *Immunopharmacol Immunotoxicol*. 2017 Feb; 39(1):45-53.
92. Geng H, Zhao L, Liang Z, Zhang Z, Xie D, Bi L, Wang Y, Zhang T, Cheng L, Yu D, Zhong C. Cigarette smoke extract-induced proliferation of normal human urothelial cells via the MAPK/AP-1 pathway. *Oncol Lett*. 2017 Jan;13(1):469-475.

Version 2016.12.12