碧云天网站 微信公众号

碧云天生物技术/Beyotime Biotechnology
订货热线: 400-1683301 或 800-8283301
订货 e-mail: order@beyotime.com
技术咨询: info@beyotime.com
网址: http://www.beyotime.com

AG 490 (JAK抑制剂)

产品编号	产品名称	包装
S1509	AG 490 (JAK抑制剂)	5mg

产品简介：

- AG 490又称Tyrphostin AG 490或Tyrphostin B42，是一种可以通透细胞膜的JAK-2蛋白酪氨酸激酶抑制剂，对其他激酶如Lck, Lyn, Btk, Syk or Src活性无明显影响。可以抑制白介素2诱导的细胞分裂并诱导一些肿瘤细胞的凋亡；能选择性地抑制CDK2的激活，导致细胞周期停滞在G1晚期和S期；可阻断IL-7诱导的T细胞中JAK-1和JAK-3激活，以及后续PI-3 kinase的磷酸化；可以抑制EGF受体的自身磷酸化(autophosphorylation)，抑制DNA合成和细胞增殖。AG 490是研究细胞信号转导过程中JAK的功能和作用的常用试剂。
- AG 490分子量为294.30，分子式为$C_{17}H_{14}N_2O_3$，CAS Number：133550-30-8。本产品为进口分装，纯度大于98%。
- AG 490不溶于水，可溶于DMSO (溶解度可达100mg/ml)、丙酮，微溶于无水乙醇(溶解度可达5mg/ml)。

包装清单：

产品编号	产品名称	包装
S1509	AG 490 (JAK抑制剂)	5mg
—	说明书	1份

保存条件：

-20°C避光保存。

注意事项：

- 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. AG 490常见使用浓度范围为10-100μM。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. Shenglan Shang, Xinran Ji, Lili Zhang, Jun Chen, Chuan Li, Rongchen Shi, Wei Xiang, Xia Kang, Dapeng Zhang, Fan Yang, Rongyang Dai, Peng Chen, Shan Chen, Yongchuan Chen, Yongsheng Li, Hongming Miao . Macrophage ABHD5 Suppresses NFκB-Dependent Matrix Metalloproteinase Expression and Cancer Metastasis Cancer Res. 2019 Nov 1;79(21):5513-5526.
2. Gao K, Wang CR, Jiang F, Wong AY, Su N, Jiang JH, Chai RC, Vatcher G, Teng J, Chen J, Jiang YW, Yu AC. . Traumatic scratch injury in astrocytes triggers calcium influx to activate the JNK/c-Jun/AP-1 pathway and switch on GFAP expression. Glia. 2013 Dec;61(12):2063-77.
3. Huang Q, Yang Y, Li X, Huang S. . Transcription suppression of SARI (suppressor of AP-1, regulated by IFN) by BCR-ABL in humanleukemia cells. TUMOR BIOL . 2011 Dec;32(6):1191-7.
4. Luan HF, Zhao ZB, Zhao QH, Zhu P, Xiu MY. . Hydrogen sulfide postconditioning protects isolated rat hearts against ischemia and reperfusioninjury mediated by the JAK2/STAT3 survival pathway. Braz J Med Biol Res. 2012 Oct;45(10):898-905.
5. Liu WH, Liu JJ, Wu J, Zhang LL, Liu F, Yin L, Zhang MM, Yu B. . Novel mechanism of inhibition of dendritic cells maturation by mesenchymal stem cells via interleukin-10 and theJAK1/STAT3 signaling pathway. PLoS One. 2013;8(1):e55487.
6. Wang S, Zhao Z, Bi Y, Sun L, Liu X, Liu W. . Tyrosine 132 phosphorylation of influenza A virus M1 protein is crucial for virus replication by controlling thenuclear import of M1. J Virol. 2013 Jun;87(11):6182-91.
7. Zhu H, Zou L, Tian J, Du G, Gao Y. . SMND-309, a novel derivative of salvianolic acid B, protects rat brains ischemia and reperfusion injury by targetingthe JAK2/STAT3 pathway. Eur J Pharmacol. 2013 Jun 11;714(1-3):23-31.
8. Liu YY, Zheng Q, Fang B, Wang W, Ma FY, Roshan S, Banafa A, Chen MJ, Chang JL, Deng XM, Li KX, Yang GX, He GY. . Germacrone induces apoptosis in human hepatoma HepG2 cells through inhibition of the JAK2/STAT3 signalling pathway. J HUAZHONG U SCI-MED. 2013 Jun;33(3):339-45.
9. Chen X, Liao C, Chu Q, Zhou G, Lin X, Li X, Lu H, Xu B, Yue Z. . Dissecting the molecular mechanism of ionizing radiation-induced tissue damage in the feather follicle. PLoS One. 2014 Feb 20;9(2):e89234.
10. Lu X, Wang J, Jin X, Huang Y, Zeng W, Zhu J. . IFN-CSP inhibiting hepatitis B virus in HepG2.2.15 cells involves JAK-STAT signal pathway. Biomed Res Int. 2015;2015:959684.

11. Ying Qian Zhang, Shun Ying Hu, Yun Dai Chen, Ming Zhou Guo, Shan Wang . 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.
12. Wu J, Guo J, Cao Q, Wang Y, Chen J, Wang Z, Yuan Z. . Autophagy impacts on oxaliplatin-induced hepatocarcinoma apoptosis via the IL-17/IL-17R-JAK2/STAT3 signaling pathway. Oncol Lett. 2017 Feb;13(2):770-776.
13. Ai HH, Zhou ZL, Sun LG, Yang MT, Li W, Yu CL, Song ZB, Huang YX, Wu Y, Liu L, Yang XG, Zhao YQ, Bao YL, Li YX. . 20(S)-25-methoxyl-dammarane-3β,12β, 20-triol negatively regulates activation of STAT3 and ERKpathways and exhibits anti-cancer effects in HepG2 cells. Apoptosis. 2017 Nov;22(11):1404-1418.
14. Chen X, Nie X, Mao J, Zhang Y, Yin K, Jiang S. . Perfluorooctanesulfonate induces neuroinflammation through the secretion of TNF-α mediated by the JAK2/STAT3 pathway. Neurotoxicology. 2018 Mar 8;66:32-42.
15. Wu CY, Yin KZ, Zhang Y, Jiao M, Zhao XY, Wu QY . 2,3,7,8-Tetrachlorodibenzo-p-dioxin Promotes Proliferation of Astrocyte Cells via the Akt/STAT3/Cyclin D1 Pathway. Biomed Environ Sci. 2019 Apr 32(4):281-290.
16. Sun C, Yang J, Cheng HB, Shen WX, Jiang ZQ, Wu MJ, Li L, Li WT, Chen TT, Rao XW, Zhou JR, Wu MH . 2-Hydroxy-3-methylanthraquinone inhibits lung carcinoma cells through modulation of IL-6-induced JAK2/STAT3 pathway. Phytomedicine. 2019 Aug 61:152848.
17. Xiaolong Zhou, Qiongyu Yuan, Chen Zhang, Zhenglie Dai, Chengtao Du, Han Wang, Xiangchen Li, Songbai Yang, Ayong Zhao . Inhibition of Japanese encephalitis virus proliferation by long non-coding RNA SUSAJ1 in PK-15 cells Virol J. 2021 Jan 28;18(1):29.

Version 2024.03.12