www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

# LW 6

产品编号： D51687

CAS: 934593-90-5

分子式： $C_{26}H_2$

纯度： ≥98%

InChi: InChI=1S/C26H29NO5/c1-31-25(30)19-2-7-23(28)22(11-19)27-24(29)15-32-21-5-3-20(4-6-21)26-12-16-8-17(13-26)10-18(9-16)14-26/h2-7,11,16-18,28H,8-10,12-15H2,1H3,(H,27,29)

InChi Key: BJRPPNOJYFZSLY-UHFFFAOYSA-N

Smiles: COC(=O)C1=CC(NC(=O)COC2C=CC(=CC=2)C23CC4CC(C2)CC(C3)C4)=C(O)C=C1

外观： 固体粉末

作用通路： Apoptosis

溶解性： Soluble in DMSO, not in water

保存条件： Store in dry, dark place for one year.

产品介绍： LW6, was first identified and reported by a group scientists from Korea. LW8 was found to inhibits the accumulation of HIF-1alpha. LW6 decreased HIF-1alpha protein expression without affecting HIF-1beta expression. It was further found that LW8 promoted the degradation of wild type HIF-1alpha, but not of a DM-HIF-1alpha with modifications of P402A and P564A, at hydroxylation sites in the oxygen-dependent degradation domain (ODDD). LW6 did not affect the activity of prolyl hydroxylase (PHD), but induced the expression of von Hippel-Lindau (VHL), which interacts with prolyl-hydroxylated HIF-1alpha for proteasomal degradation. In the presence of LW8, knockdown of VHL did not abolish HIF-1alpha protein accumulation, indicating that LW8 degraded HIF-1alpha via regulation of VHL expression. In mice carrying xenografts of human colon cancer HCT116 cells, LW8 demonstrated strong anti-tumor efficacy in vivo and caused a decrease in HIF-1alpha expression in frozen-tissue immunohistochemical staining. These data suggest that LW8 may be valuable in the development of a HIF-1alpha inhibitor for cancer treatment. (source: Biochem Pharmacol. 2010 Oct 1;80(7):982-9.)

产品描述：LW6是新颖的HIF-1抑制剂,IC50值为4.4 μM。

体外研究：LW6降低HIF-1α蛋白表达而不影响HIF-1β表达。 LW6影响HIF-1α蛋白的稳定性。 LW6在氧依赖性降解结构域中的羟基化位点促进野生型HIF-1α的降解, 但不促进具有P402A和P564A修饰的DM-HIF-1α的降解。 LW6诱导von Hippel-Lindau(VHL)的表达, 其与脯氨酰-羟基化的HIF-1α相互作用以进行蛋白酶体降解。在存在LW6的情况下, 敲低VHL不会消除HIF-1α蛋白积累, 表明LW6通过调节VHL表达降解HIF-1α。在过量表达BCRP的MDCKII-BCRP细胞中,LW6显着增强米托蒽醌(一种BCRP底物)的细胞积累。 LW6还在浓度为0.1-10μM时下调BCRP表达。 LW6在20mM的A549细胞中抑制由缺氧诱导的HIF1α的表达, 与von Hippel Lindau蛋白无关。 LW6诱

导缺氧选择性凋亡, 同时降低线粒体膜电位。

体内研究：在携带人结肠癌HCT116细胞的异种移植物的小鼠中,LW6在体内显示出强的抗肿瘤功效并且导致冷冻组织免疫组织化学染色中HIF-1α表达的降低。