

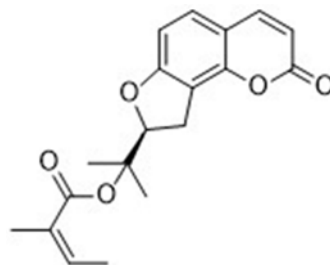
二氢欧山芹醇当归酸酯(98%, HPLC)

产品编号	产品名称	包装
SM1120-10mM	二氢欧山芹醇当归酸酯(98%, HPLC)	10mM×0.2ml
SM1120-5mg	二氢欧山芹醇当归酸酯(98%, HPLC)	5mg
SM1120-25mg	二氢欧山芹醇当归酸酯(98%, HPLC)	25mg
SM1120-100mg	二氢欧山芹醇当归酸酯(98%, HPLC)	100mg

产品简介:

➤ 化学信息:

中文名	二氢欧山芹醇当归酸酯
英文名	Columbianadin
中文别名	二氢欧山芹当归酸酯
英文别名	Zosimin; Columbianin
来源	重齿毛当归 <i>Angelica pubescens</i> Maxim. f. <i>biserrata</i> Shan et Yuan; 蛇床 <i>Cnidium monnieri</i> (L.) Cuss.
化合物类型	苯丙素类(Phenylpropanoids)>香豆素(Coumarins)
化学式	C ₁₉ H ₂₀ O ₅
分子量	328.36
CAS号	5058-13-9
纯度	98%, HPLC
溶剂/溶解度	DMSO: 33.33 mg/ml (101.50 mM); Water: < 0.1 mg/ml (insoluble)
溶液配制	5mg加入1.53ml DMSO, 或者每3.28mg加入1ml DMSO, 配制成10mM溶液。



➤ 生物信息

产品描述	Columbianadin, a natural coumarin from, is known to have various biological activities including anti-inflammatory and anti-cancer effects.				
信号通路	Apoptosis				
靶点	Necroptosis	-	-	-	-
IC ₅₀	50 μM	-	-	-	-
体外研究	Columbianadin (CBN) effectively suppresses the growth of colon cancer cells. Low concentration (up to 25 μM) of Columbianadin induces apoptosis, and high concentration (50 μM) of Columbianadin induces necroptosis. The induction of apoptosis by Columbianadin is correlated with the modulation of caspase-9, caspase-3, Bax, Bcl-2, Bim and Bid, and the induction of necroptosis is related with RIP-3, and caspase-8. In addition, Columbianadin induces the accumulation of ROS and imbalance in the intracellular antioxidant enzymes such as SOD-1, SOD-2, catalase and GPx-1. Columbianadin shows the most effective growth inhibitory activity against human colorectal cancer cells. Accordingly, further study is performed using HCT116 cells to give the detailed growth-inhibitory mechanism of action mediated by Columbianadin. The cells treated with various concentrations of Columbianadin (0-100 μM) exhibit a dose- and time-dependent growth inhibition with an IC ₅₀ value of 47.2 and 32.4 μM after 48 and 72 h incubation, respectively. Treatment of various concentrations (12.5, 25, and 50 μM) of Columbianadin for 48 h in HCT116 cells decreases the number of cells and increases the floating cells. Apparent morphological changes with round-shape and dying cells are also observed at 25 and 50 μM Columbianadin -treated cells.				
体内研究	The analysis method is successfully applied to a tissue distribution study of Columbianadin (CBN) and Columbianetin (CBT) after intravenous administration of Columbianadin to rats. The results				

	of this study indicated that Columbianadin can be detected in all of the selected tissues after i.v. administration. Columbianadin is distributed to rat tissues rapidly and can be metabolized to CBT in most detected tissues. Of the detected tissues, heart had the highest uptake of Columbianadin, which suggests that heart might be one of the main target tissues of Columbianadin.
临床实验	N/A

参考文献:

1. Kang JI, et al. Biomol Ther (Seoul). 2016,24(3):320-7.
2. Zhang YB, et al. Biomed Chromatogr. 2016,30(2):256-62.

包装清单:

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SM1120-100mg	二氢欧山芹醇当归酸酯(98%, HPLC)	100mg
-	说明书	1份

保存条件:

-20°C保存, 至少一年有效。固体粉末4°C保存, 至少一个月有效。如果溶于非DMSO溶剂, 建议分装后-80°C保存, 预计6个月内有效。

注意事项:

- 本产品可能对人体有一定的毒害作用, 请注意适当防护, 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. 收到产品后请立即按照说明书推荐的条件保存。使用前可以在2,000-10,000g离心数秒, 以使液体或粉末充分沉降至管底后再开盖使用。
2. 对于10mM溶液, 可直接稀释使用。对于固体, 请根据本产品的溶解性及实验目的选择相应溶剂配制高浓度的储备液(母液)后使用。
3. 具体的最佳工作浓度请参考本说明书中的体外、体内研究结果或其它相关文献, 或者根据实验目的, 以及所培养的特定细胞和组织, 通过实验进行摸索和优化。
4. 不同实验动物依据体表面积等效剂量转换表请参考如下网页:
<https://www.beyotime.com/support/animal-dose.htm>

Version 2021.05.13