碧云天网站 微信公众号

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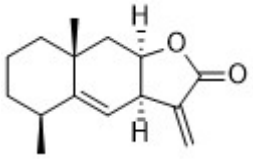
# 土木香内酯(98%, HPLC)

| 产品编号 | 产品名称 | 包装 |
|---|---|---|
| SM9016-10mM | 土木香内酯(98%, HPLC) | 10mM×0.2ml |
| SM9016-25mg | 土木香内酯(98%, HPLC) | 25mg |
| SM9016-100mg | 土木香内酯(98%, HPLC) | 100mg |

## 产品简介:

➢ **化学信息:**

| | |
|---|---|
| 中文名 | 土木香内酯 |
| 英文名 | Alantolactone |
| 中文别名 | 木香脑；土木香脑；阿兰内酯 |
| 英文别名 | (+)-Alantolactone; Alant camphor; Inula camphor; Helenine; Alantic anhydride; Alantcamphor |
| 来源 | 土木香*Inula helenium* L. |
| 化合物类型 | 内酯(Lactones) |
| 化学式 | $C_{15}H_{20}O_2$ |
| 分子量 | 232.32 |
| CAS号 | 546-43-0 |
| 纯度 | 98%, HPLC |
| 溶剂/溶解度 | DMSO: ≥ 100 mg/mL (430.44 mM) |
| 溶液配制 | 3mg加入1.29ml DMSO，或者每2.32mg加入1ml DMSO，配制成10mM溶液。 |



➢ **生物信息**

| | | | | | |
|---|---|---|---|---|---|
| 产品描述 | Alantolactone is a selective STAT3 inhibitor, with potent anticancer activity. Alantolactone induces apoptosis in cancer. | | | | |
| 信号通路 | Apoptosis | | | | |
| 靶点 | STAT3 | - | - | - | - |
| $IC_{50}$ | - | - | - | - | - |
| 体外研究 | Alantolactone induces apoptosis in HepG2 cells in a dose-dependent manner. This Alantolactone-induced apoptosis is found to be associated with GSH depletion, inhibition of STAT3 activation, ROS generation, mitochondrial transmembrane potential dissipation, and increased Bax/Bcl-2 ratio and caspase-3 activation. Alantolactone decreases STAT3 translocation to the nucleus, its DNA-binding, and STAT3 target gene expression. Alantolactone significantly inhibits STAT3 activation with a marginal effect on MAPKs and on NF-κB transcription; however, this effect is not mediated by inhibiting STAT3 upstream kinases. Alantolactone induces activin/SMAD3 signaling in human colon adenocarcinoma HCT-8 cells. Alantolactone performs its antitumor effect by interrupting the interaction between Cripto-1 and the activin receptor type IIA in the activin signaling pathway. Alantolactone (5 μg/mL, 24 h) inhibits cell proliferation in colon adenocarcinoma HCT-8 cells. | | | | |
| 体内研究 | It is found that the average tumor volume in the Alantolactone-treated mice is approximately 2.17-fold lower compared with that in the control mice. However the administration of Alantolactone does not affect the overall bodyweight during the experimental period, suggesting no apparent toxicity. Additionally, the average tumor weight is significantly lower in the Alantolactone-treated mice compared with the control mice. What’s more, the administration of Alantolactone results in a significant decrease in p-STAT3 and cyclin D1 expression in the tumor tissues. | | | | |
| 临床实验 | N/A | | | | |

## 参考文献：

1. Khan M, et al. Biomed Res Int. 2013,2013:719858.
2. Chun J, et al. Cancer Lett. 2015,357(1):393-403.

## 包装清单：

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| SM9016-25mg | 土木香内酯(98%, HPLC) | 25mg |
| SM9016-100mg | 土木香内酯(98%, HPLC) | 100mg |
| - | 说明书 | 1 份 |

## 保存条件：

-20℃保存，至少一年有效。固体粉末4℃保存，至少一个月有效。如果溶于非DMSO溶剂，建议分装后-80℃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成高浓度的储备液(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的等效剂量转换表请参考如下网页：
   https://www.beyotime.com/support/animal-dose.htm

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