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

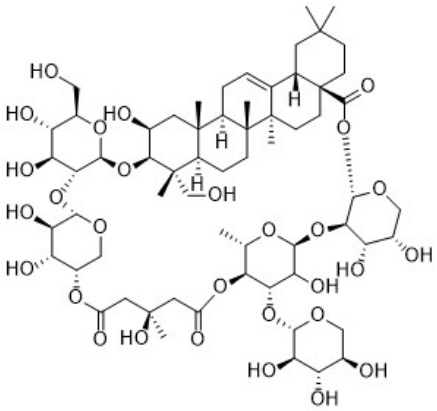
土贝母苷甲(98%, HPLC)

产品编号	产品名称	包装
SM6120-10mM	土贝母苷甲(98%, HPLC)	10mM×0.2ml
SM6120-25mg	土贝母苷甲(98%, HPLC)	25mg
SM6120-100mg	土贝母苷甲(98%, HPLC)	100mg

产品简介:

➢ **化学信息:**

中文名	土贝母苷甲
英文名	Tubeimoside I
中文别名	土贝母皂甙甲
英文别名	Tubeimoside-1; Lobatoside-H
来源	土贝母*Bolbostemma paniculatum*(Maxim.) Franquet
化合物类型	萜类(Terpenoids)>三萜>齐墩果烷型五环三萜皂苷
化学式	$C_{63}H_{98}O_{29}$
分子量	1319.44
CAS号	102040-03-9
纯度	98%, HPLC
溶剂/溶解度	DMSO：≥ 100 mg/ml (75.79 mM)
溶液配制	15mg加入1.14ml DMSO，或者每13.19mg加入1ml DMSO，配制成10mM溶液。



➢ **生物信息**

产品描述	Tubeimoside I(Lobatoside-H) is an extract from Chinese herbal medicine Bolbostemma paniculatum (MAXIM.) FRANQUET (Cucurbitaceae) has been shown as a potent anti-tumor agent for a variety of human cancers.				
信号通路	Apoptosis				
靶点	Bcl-2	Bax	Capase-3	TNF-α	IL-6/1β
IC_{50}	-	-	-	-	-
体外研究	TBMS I inhibited the proliferation of both HepG2 and L-02 cells in a dose- and time-dependent manner, but HepG2 cells appeared more sensitive to the agent. When exposed to TBMS I for 24, 48 and 72 h, IC50 for HepG2 cells versus L-02 cells were 15.5 vs. 23.1, 11.7 vs. 16.2, 9.2 vs. 13.1 (μM, p<0.01), respectively. TBMS I induced cell shrinkage, nuclear condensation and fragmentation, cell cycle arrest at the G2/M phase, mitochondrial membrane disruption, release of cytochrome c from the mitochondria, activation of caspase 3 and 9, and shifting Bax/Bcl-2 ratio from being anti-apoptotic to pro-apoptotic, all indicative of initiation and progression of apoptosis involving mitochondrial dysfunction. TBMS1-induced molecular events were related to mitochondria-induced intrinsic apoptosis and P21-cyclin B1/cdc2 complex-related G2/M cell cycle arrest. TBMS1 combined with CDDP promoted cell apoptosis, decreased proliferation activity and increased cytosolic Ca2+ levels. Bcl-2 protein expression was down-regulated but Bax was up-regulated. Moreover, GST-π mRNA and protein expression were decreased. TBMS1 reduced the resistance of the cells to CDDP-induced cytotoxicity. Treatment with TBMS1 resulted in dose- and time-dependent inhibition of proliferation, led to arrest in phase G2/M of the cell cycle and increased the levels of intracellular Ca2 . Furthermore, TBMS1 up-regulated the levels of the glucose-regulated protein 78/immunoglobuin heavy chain binding protein (GRP78/Bip), C/EBP homologous protein (CHOP), Bax, and cleaved caspase-3 and down-regulated the levels of Bcl-2.				
体内研究	TBMS1 significantly inhibited the production of the pro-inflammatory cytokines, TNF-α, IL-6 and IL-1β in vitro and in vivo. Pretreatment with TBMS1 markedly attenuated the development of pulmonary edema, histological severities and inflammatory cells infiltration in mice with ALI.				

临床实验	N/A

参考文献：

1. Wang Y, et al. Biol Pharm Bull. 2011,34(6):831-8.
2. Xu Y, et al. Chin J Cancer Res. 2013,25(3):312-21.
3. Wu Q, et al. Immunopharmacol Immunotoxicol. 2013,35(4):514-23.
4. Liu HZ, et al. Mol Med Rep. 2011,4(5):985-92.
5. Chen WJ, et al. Int J Oncol. 2012,40(2):535-43.

包装清单：

产品编号	产品名称	包装
SM6120-10mM	土贝母苷甲(98%, HPLC)	10mM×0.2ml
SM6120-25mg	土贝母苷甲(98%, HPLC)	25mg
SM6120-100mg	土贝母苷甲(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

Version 2022.04.25