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牛蒡苷(98%, HPLC)

产品编号	产品名称	包装
SM1096-10mM	牛蒡苷(98%, HPLC)	$10\text{mM} \times 0.2\text{ml}$
SM1096-25mg	牛蒡苷(98%, HPLC)	25mg
SM1096-100mg	牛蒡苷(98%, HPLC)	100mg

产品简介:

▶ 化学信息:

中文名	牛蒡苷
英文名	Arctiin
中文别名	牛蒡子苷; 牛蒡子甙
英文别名	Arctii; NSC 315527; Arctigenin-4-glucoside
来源	牛蒡 <i>Arctium lappa</i> L.
化合物类型	苯丙素类(Phenylpropanoids)>木脂素>木脂内酯
化学式	$C_{27}H_{34}O_{11}$
分子量	534.55
CAS号	20362-31-6
纯度	98%, HPLC
溶剂/溶解度	DMSO: 250 mg/ml (467.68 mM) Water: 10 mg/ml (18.71 mM; ultrasonic and warming and heat to 60°C)
溶液配制	10mg加入1.87ml DMSO,或者每5.35mg加入1ml DMSO,配制成10mM溶液。

> 生物信息

产品描述	Arctiin(NSC 315527), a plant lignan that can be extracted from the Arctium lappa (burdock) seeds, is a possible environmental endocrine disruptor compounds and have been shown to influence sex hormone metabolism as well as protein synthesis, steroid biosynthesis.					
信号通路	-	-				
靶点	Cyclin D1 Protein	-	-	-	-	
IC ₅₀	-	-	-	-	-	
体外研究	Treatment of PC-3 cells with arctiin decreased the cell number in a concentration- and time-dependent manner in serum-containing condition. Arctiin preferentially induced cell detachment, but did not have anti-proliferation or cytotoxic effects in PC-3 cells. The arctiin-induced effect was inhibited by cycloheximide, indicating that protein synthesis was required. Although arctiin, the active component of AL that has been described in the literature, was not able to reduce degranulation in RBL-2H3 cells, a single high-performance liquid chromatography (HPLC) fraction from the AL extract inhibited beta-hexosaminidase release (IC50= 22.2 microg/ml). The growth inhibition caused by arctiin is associated with the down-regulation of cyclin D1 protein expression. Furthermore, thearctiin-induced suppression of cyclin D1 protein expression occurs in various types of human tumor cells, including osteosarcoma, lung, colorectal, cervical and breast cancer, melanoma, transformed renal cells and prostate cancer. Depletion of the cyclin D1 protein using small interfering RNA-rendered human breast cancer MCF-7 cells insensitive to the growth inhibitory effects of arctiin, implicates cyclin D1 as an important target of arctiin.					
体内研究	Histopathological evaluation of prostate revealed that all the rats in any group developed adenocarcinoma in dorsolateral lobe of prostate, except two rats in 0.1% arctiin treated and one rat in 0.002% arctiin treated groups without prostate adenocarcinoma development. After oral					

	administration of arctiin (30, 60, 120 mg/kgd) for three weeks, the levels of serum creatinine (Scr)			
	and blood urea nitrogen (BUN) and 24-h urine protein content markedly decreased, while			
	endogenous creatinine clearance rate (ECcr) significantly increased. STZ-induced diabetic rats			
	were treated witharctiin at the dosage of 60 or 40 mg/kg/day via intraperitoneal injection for 8			
	weeks. Blood glucose and 24-h urinary albumin content were measured, and kidney			
	histopathological changes were monitored.			
临床实验	N/A			

参考文献:

- 1. Huang DM, et al. Prostate. 2004,59(3):260-7.
- 2. Knipping K, et al. Exp Biol Med (Maywood). 2008,233(11):1469-77.
- 3. Zeng Y, et al. Cancer Lett. 2005,222(2):145-51.
- 4. Wu JG, et al. Phytomedicine. 2009,16(11):1033-41.
- 5. Ma ST, et al. Phytother Res. 2013,27(10):1474-80.

包装清单:

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SM1096-25mg	牛蒡苷(98%, HPLC)	25mg
SM1096-100mg	牛蒡苷(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
- 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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