

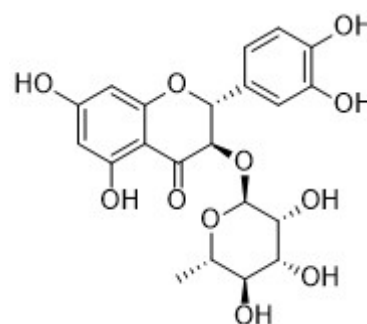
落新妇苷(98%, HPLC)

产品编号	产品名称	包装
SM2127-10mM	落新妇苷(98%, HPLC)	10mM×0.2ml
SM2127-25mg	落新妇苷(98%, HPLC)	25mg
SM2127-100mg	落新妇苷(98%, HPLC)	100mg

产品简介:

➤ 化学信息:

中文名	落新妇苷
英文名	Astilbin
中文别名	-
英文别名	Taxifolin 3-rhamnoside
来源	土茯苓 <i>Smilax glabra</i> ; 黄杞 <i>Engelhardia roxburghiana</i> Wall.
化合物类型	黄酮类(Flavonoids)>黄酮>二氢黄酮醇
化学式	C ₂₁ H ₂₂ O ₁₁
分子量	450.39
CAS号	29838-67-3
纯度	98%, HPLC
溶剂/溶解度	DMSO: 100 mg/ml (222.03 mM)
溶液配制	5mg加入1.11ml DMSO, 或者每4.50mg加入1ml DMSO, 配制成10mM溶液。



➤ 生物信息

产品描述	Astilbin, a flavonoid compound, is isolated from the rhizome of <i>Smilax glabra</i> . Astilbin enhances NRF2 activation. Astilbin also suppresses TNF- α expression and NF- κ B activation.				
信号通路	-				
靶点	TNF- α	NF- κ B	NRF2	-	-
IC ₅₀	-	-	-	-	-
体外研究	Astilbin is a common dietary flavonoid that can be found in various kinds of herbs and foods such as <i>Smilax Glabra</i> , <i>Sarcandra glabra</i> , grape and red wine. Astilbin markedly inhibits cisplatin-induced cell apoptosis and recovers cell growth. Astilbin significantly decreases reactive oxygen species (ROS) accumulation and alleviates ROS-induced activation of p53, MAPKs and AKT signaling cascades, which in turn attenuates cisplatin-induced HEK-293 cell apoptosis. Astilbin effectively enhances NRF2 activation and transcription of its targeting antioxidant genes to reduce ROS accumulation in cisplatin-induced HEK-293 cells. Astilbin obviously suppresses tumor necrosis factor alpha (TNF- α) expression and NF- κ B activation, and also inhibits the expression of induced nitric oxide synthase (iNOS) and cyclooxygenase-2 (COX-2). To measure the effects of Astilbin on the growth of CDDP-treated renal cells, HEK-293 cells are treated with CDDP (100 μ M) and/or Astilbin (200 μ M). Astilbin treatment significantly improves cell growth in CDDP-induced HEK-293 cells.				
体内研究	To explore whether Astilbin improves CDDP-induced nephrotoxicity in vivo, an acute cisplatin nephrotoxic mouse model is established. Single injection of CDDP with 8 mg/kg dose results in notable weight loss compared with control group. However, the phenomenon is significantly alleviated by Astilbin at dose of 50 mg/kg. The mice fed Astilbin alone do not show any obvious alteration in body weight. Similarly, serum creatinine (SCr) and blood urea nitrogen (BUN) are higher in CDDP-treated mice than in control group. Treatment with Astilbin also decreases SCr and BUN levels. To examine the protective effect of Astilbin on CDDP-induced renal histopathological damage, the mouse kidney sections are stained with H&E. The mice in control group and Astilbin				

	treated group have normal kidney morphology, while kidneys in CDDP group show severe damage with tubular degeneration, necrosis and cystic dilatation of the tubules with focal hemorrhages. Administration of Astilbin mitigated kidney injury, resulting in lower histopathological score compared to CDDP group. The apoptosis of renal cells is also detected using TUNEL staining to determine whether Astilbin treatment decreased renal cell apoptosis in CDDP-induced acute nephrotoxic mice.
临床实验	N/A

参考文献:

1. Wang SW, et al. Food Chem Toxicol. 2018,114:227-236.

包装清单:

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SM2127-10mM	落新妇苷(98%, HPLC)	10mM×0.2ml
SM2127-25mg	落新妇苷(98%, HPLC)	25mg
SM2127-100mg	落新妇苷(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>

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