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

碧云天网站 微信公众号

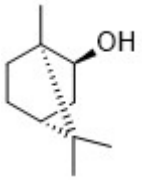
(+)-冰片(98%, HPLC)

产品编号	产品名称	包装
SM5060-10mM	(+)-冰片(98%, HPLC)	10mM×0.2ml
SM5060-25mg	(+)-冰片(98%, HPLC)	25mg
SM5060-100mg	(+)-冰片(98%, HPLC)	100mg

产品简介:

- **化学信息:**

中文名	(+)-冰片
英文名	(+)-Borneol
中文别名	D-龙脑
英文别名	(1R,2S,4R)-Borneol; endo-(1R)-1,7,7-Trimethylbicyclo[2.2.1]heptan-2-ol; d-Borneol
来源	艾纳香*Blumea balsamifera*（L.) DC.；香樟*Cinnamomum camphora* (Linn) Presl
化合物类型	萜类(Terpenoids)>单萜
化学式	$C_{10}H_{18}O$
分子量	154.25
CAS号	464-43-7
纯度	98%, HPLC
溶剂/溶解度	DMSO: 100 mg/mL (648.30 mM)
溶液配制	2mg加入1.30ml DMSO，或者每1.54mg加入1ml DMSO，配制成10mM溶液。



- **生物信息**

产品描述	(+)-BORNEOL is a natural bicyclic monoterpene used for analgesia and anesthesia in traditional Chinese medicine. (+)-BORNEOL enhances GABA receptor activity with an EC50 of 248 μM.				
信号通路	-				
靶点	GABA	-	-	-	-
IC_{50}	248 μM	-	-	-	-
体外研究	(+)-borneol significantly inhibits the expression of iNOS and TNF-α in a dose-dependent manner in the LPS-stimulated BV-2 cells[1]. Aβ-induced cell cytotoxicity is inhibited by 100μM of (-) and (+) borneol treatment. Treatment of borneol significantly decreases ROS generation. The expression of HO-1 and nuclear translocation of Nrf2 are increased by Aβ treatment. This nuclear translocation of Nrf2 is further increased by administration of borneol. Compared with the Aβ treated group, the (+) borneol treated group significantly increases Bcl-2 expression with decreased expression of Bax. Thus, Borneol protects SH-SY5Y cells against Aβ-induced toxicity, exerts an antioxidative effect and suppresses apoptosis				
体内研究	(+)-borneol (1.0 mg/kg) significantly ameliorated infarct size and neurological scoresvia reducing the expression of inducible nitric oxide synthase (iNOS) and tumor necrosis factor-alpha (TNF-α) in a dose dependent manner. Notably, (+)-borneol showed long-term effects on the improvement of sensorimotor functions in the photothrombotic model of stroke, which decreased the number of foot faults in the grid-walking task and forelimb asymmetry scores in the cylinder task, at least in part through reducing loss of dendritic spines in the length, brunch number and density. Suggest that (+)-borneol could serve as a therapeutic target for ischemic stroke.				
临床实验	N/A				

参考文献:

1. Hur J, et al. Pharmaceutical Biology. 2013,51(1):30-35.
2. Chang L, et al. Journal of Biomedical Research. 2017,31(4):306-314.

包装清单：

产品编号	产品名称	包装
SM5060-10mM	(+)-冰片(98%, HPLC)	10mM×0.2ml
SM5060-25mg	(+)-冰片(98%, HPLC)	25mg
SM5060-100mg	(+)-冰片(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