

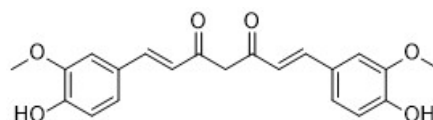
## 姜黄素(98%, HPLC)

产品编号	产品名称	包装
SM1079-10mM	姜黄素(98%, HPLC)	10mM×0.2ml
SM1079-25mg	姜黄素(98%, HPLC)	25mg
SM1079-100mg	姜黄素(98%, HPLC)	100mg

### 产品简介:

#### ➤ 化学信息:

中文名	姜黄素
英文名	Curcumin
中文别名	酸性黄; 姜黄色素
英文别名	Diferuloylmethane
来源	姜黄 <i>Curcuma longa</i> L.
化合物类型	苯丙素类(Phenylpropanoids)>木脂素>简单木脂素
化学式	C <sub>21</sub> H <sub>20</sub> O <sub>6</sub>
分子量	368.38
CAS号	458-37-7
纯度	98%, HPLC
溶剂/溶解度	DMSO: 120 mg/mL (325.75 mM) Water: < 0.1 mg/mL (insoluble)
溶液配制	5mg加入1.36ml DMSO, 或者每3.68mg加入1ml DMSO, 配制成10mM溶液。



#### ➤ 生物信息

产品描述	Curcumin (Diferuloylmethane), a natural phenolic compound, is a p300/CREB-binding protein-specific inhibitor of acetyltransferase, represses the acetylation of histone/nonhistone proteins and histone acetyltransferase-dependent chromatin transcription. Curcumin shows inhibitory effects on NF-κB and MAPKs, and has diverse pharmacologic effects including anti-inflammatory, antioxidant, antiproliferative and antiangiogenic activities. Curcumin induces stabilization of Nrf2 protein through Keap1 cysteine modification.				
信号通路	NF-κB; MAPK				
靶点	p300/CREB-binding protein	Keap1-Nrf2	-	-	-
IC <sub>50</sub>	-	-	-	-	-
体外研究	Curcumin exerts its chemopreventive effects partly through the activation of nuclear factor (erythroid-2 related) factor 2 (Nrf2) and its antioxidant and phase II detoxifying enzymes. Curcumin inhibits T47D cells growth, with IC <sub>50</sub> s of 25, 19 and 17.5 μM for 24, 48 and 72 h MTT assays respectively. IC <sub>50</sub> s of curcumin and silibinin mixture against T47D cells, are 17.5, 15, and 12 μM for 24, 48, and 72 h exposure times, respectively. Curcumin (2.5-80 μM) induces apoptotic cell death in AGS and HT-29 cell lines, and the IC <sub>50</sub> is 21.9±0.1, 40.7±0.5 μM, respectively, in both AGS and HT-29 cell lines. Curcumin-induced apoptosis requires caspase activities in AGS and HT-29 cells. Curcumin induces ER Ca <sup>2+</sup> decline and mitochondrial Ca <sup>2+</sup> overloading. Curcumin induces the G2/M cell cycle arrest of LNCaP and PC-3 cells in a dose dependent manner. Curcumin upregulates the protein level of NF-kappaB inhibitor IkappaBalpha and downregulates protein levels of c-Jun and AR.				
体内研究	Curcumin (10 mg/kg, p.o.) significantly prevents decrease in the percentage of sucrose consumption, as compared to the CMS-exposed rats. Curcumin treatment results in significant prevention of increase in TNF-α and IL-6 levels in stressed rats. Curcumin decreases binding of p300/CREB-binding protein (CBP) at the brain-derived neurotrophic factor (BDNF) promoter at 20				

	mg/kg (i.p.), reduces binding of P300/CBP at the BDNF promoter at 40 mg/kg, and decreases binding all the four proteins of p300/CBP and H3K9ac/H4K5ac at the BDNF promoter at 60 mg/kg in chronic constriction injury (CCI) rats.
临床实验	NCT04528212: Diabetes Mellitus, Type 2, Phase 4; NCT04044417: Periodontitis, Phase 4; NCT02532023: Migraine, Phase 4; NCT01052597: Type 2 Diabetes Mellitus Cardiovascular Abnormalities, Phase 4; NCT03917784: PreDiabetes, Phase 4; NCT04205929: Bleeding Implants Breakthrough Bleeding, Phase 4; NCT00779493: Irritable Bowel Syndrome, Phase 4; NCT02494141: Polycystic Kidney, Autosomal Dominant, Phase 4; NCT01750359: Major Depression, Phase 4; NCT04032132: Periodontitis, Phase 4; NCT02298985: Chronic Schizophrenia, Phase 4; NCT01052025: Type 2 Diabetes Pre-diabetes Insulin Resistance Cardiovascular Risk, Phase 4.

#### 参考文献:

1. Gao S, et al. Food Chem Toxicol. 2013,59:739-47.
2. Nasiri M, et al. Asian Pac J Cancer Prev. 2013,14(6):3449-53.
3. Cao A, et al. Apoptosis. 2013,18(11):1391-1402.
4. Jiang H, et al. Prog Neuropsychopharmacol Biol Psychiatry. 2013,47:33-9.
5. Guo H, et al. Pharmazie. 2013,68(6):431-4.

#### 包装清单:

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-	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