

伊立替康; Irinotecan

产品编号: MB1124 质量标准: >98%,BR 包装规格: 100MG;1G 产品形式: 淡黄色粉末

基本信息

分子式	C33H38N4O6		
分子量	586.69		
CAS No.	97682-44-5	结构式	T T T N
储存条件	2-8℃,避光防潮密闭干燥		
溶解性	DMSO:25mg/ml		но о
注意事项	京 溶解性是在室温下测定的,如果温度过低,可能会影响其溶解性。		
其他说明	为了您的安全和健康,请穿实验服并戴一次性手套操作。		

物理性状及指标:

外观:.....淡黄色粉末

溶解性:.....DMSO:25mg/ml

生物活性

Description	Irinotecan is a water soluble topoisomerase I inhibitor with antitumor activity.		
IC ₅₀ & Target	Topoisomerase I		
	Irinotecan is a topoisomerase I inhibitor. Irinotecan inhibits the growth of LoVo		
	and HT-29 cells, with IC $_{50}$ s of 15.8 \pm 5.1 and 5.17 \pm 1.4 μ M, respectively, and		
In Vitro	induces similar amounts of cleavable complexes in both in LoVo and HT-29 cells.		
	Irinotecan suppresses the proliferation of human umbilical vein endothelial cells		
	(HUVEC), with an IC $_{50}$ of 1.3 μ M		
	Irinotecan (CPT-11, 5 mg/kg) significantly inhibits the growth of tumors by		
	intratumoral injection daily for 5 days, on two consecutive weeks in rats, and such		
	effects also occur via continuous intraperitoneal infusion by osmotic minipump		
	into mice. However, Irinotecan (10 mg/kg) shows no effect on the growth of		
In Vivo	tumor by i.p ^[1] . Irinotecan (CPT-11, 100-300 mg/kg, i.p.) apparently suppresses		
III VIVO	tumor growth of HT-29 xenografts in athymic female mice by day 21. The two		
	groups of Irinotecan (125 mg/kg) plus TSP-1 (10 mg/kg per day) or Irinotecan		
	(150 mg/kg) in combination TSP-1 (20 mg/kg per day) are nearly equally effective		
	and inhibit tumor growth 84% and 89%, respectively, and both are more effective		
	than Irinotecan alone at doses of 250 and 300 mg/kg		

用途及描述: 科研试剂,广泛应用于分子生物学,药理学等科研方面,严禁用于人体。本品是一种拓扑异构酶 I 抑制剂。





使用方法推荐:

储液配置

体积。	1 mg	5 mg	10 mg
1 mM	1.7045 mL	8.5225 mL	17.0451 mL
5 mM	0.3409 mL	1.7045 mL	3.4090 mL
10 mM	0.1705 mL	0.8523 mL	1.7045 mL

经典实验操作(仅供参考)

红央关业深TF(1X1共	20)		
	Exponentially growing cells are seeded in 20 cm2 dishes with an optimal cell		
	number for each cell line (20,000 for LoVo cells, 100,000 for HT-29 cells). They are		
	treated 2 days later with increasing concentrations of irinotecan or SN-38 for		
	cell doubling time (24 h for LoVo cells, 40 h for HT-29 cells). After washing w		
Cell Assay	0.15 M NaCl, the cells are further grown for two doubling times in normal		
	medium, detached from the support with trypsin-EDTA and counted in		
	hemocytometer. The IC50 values are then estimated as the drug concentrations		
	responsible for 50% growth inhibition as compared with cells incubated without		
	drug. MCE has not independently confirmed the accuracy of these methods. They		
	are for reference only.		
	Irinotecan is dissolved in 0.9% sodium chloride sterile solution.		
	Irinotecan has been administered by intratumoral injection at 0.1 cc volume of		
	the appropriate solution, for a doses of 5 mg/kg daily for 5 days, on two		
Animal	consecutive weeks, followed by a 7-days rest period, referred to as one cycle of		
Administration	therapy. Rats receive three cycles over a period of 8 weeks. Control animals		
	receive 0.1 cc of sterile 0.9% sodium chloride solution by intratumoral injection in		
	the same rule of administration as that of animals of group II.		
Animal Administration	drug. MCE has not independently confirmed the accuracy of these methods. The are for reference only. Irinotecan is dissolved in 0.9% sodium chloride sterile solution. Irinotecan has been administered by intratumoral injection at 0.1 cc volume the appropriate solution, for a doses of 5 mg/kg daily for 5 days, on two consecutive weeks, followed by a 7-days rest period, referred to as one cycle therapy. Rats receive three cycles over a period of 8 weeks. Control animal receive 0.1 cc of sterile 0.9% sodium chloride solution by intratumoral injection		

【注意 】

- ●我司产品为非无菌包装,若用于细胞培养,请提前做预处理,除去热原细菌,否则会导致染菌。
- ●部分产品我司仅能提供部分信息,我司不保证所提供信息的权威性,以上数据仅供参考交流研究之用。

部分客户使用美仑产品发表文献举例

•Hypoxia-responsive drug-drug conjugated nanoparticles for breast cancer synergistic therapy.





活性化合物操作注意事项

- 1 **产品分装**:您收到货物后最好不要自己进行分包,因为分包环境、包装材料等因素可能导致分包后的产品变质;如您有特殊包装要求,请在订购时候与我们客服代表阐明,当然价格会做适当调整。对于开盖后,长期未使用的,请务必重新密封好,建议 Parafilm 封口膜,并按照相应储存条件使用。如果放置时间过长,超过产品有效期,建议您重新购买,以免影响实验质量。
- **2 储备液制备**:大部分试剂的溶液形式稳定性较差,请优先采用现用现配的方式。如需制备储存液,请选用合适溶剂,细胞培养类多选择 DMSO,储备液制备完成后请于零下 80 摄氏度储存,一般可以稳定存在 3-6 个月以上。在使用前,再对储备液进行稀释。避免储备液反复冻融。
- **3 细胞培养工作液制备**:请根据个人需要正确计算浓度,稀释储备液或者直接用粉末配置工作液。由于大部分化合物是脂溶性的,所以使用水性溶剂(如 PBS)稀释时,可能会析出沉淀,可通过超声使固体重新溶解,不会对实验产生影响。如用 DMSO 作为溶剂,请确保 DMSO 最终使用浓度<0.3%,以避免细胞毒性。

灭菌方式,我们建议通过 0.22UM 微膜过滤方式除菌,请勿采用紫外,射线或者高温灭菌方式,否则会影响化合物活性,甚至破坏其结构导致彻底失活。

4 体内动物实验应用:由于很多化合物是脂溶性的,动物实验工作液配制失活,可能会需要加入一些药用辅料作为助溶剂,如吐温,CMC-NA,甘油等,具体需要客户查阅相关文献决定。如使用 DMSO,请确保 DMSO的终浓度<5%,以避免毒性作用。给药剂量设计时候,可以参考下表

+ 地加/ 本 丰	面积等效剂	黒 ^協 管丰
ムカイルカイン	旧州共主文文介	単伏县衣

物种	体重(KG)	体表面积(M2)	Km 系数
狒狒	12	0.6	20
狗	10	0.5	20
猴	3	0.24	12
兔	1.8	0.15	12
豚鼠	0.4	0.05	8
大鼠	0.15	0.025	6
仓鼠	0.08	0.02	5
小鼠	0.02	0.007	3

动物 A(mg/kg)=动物 B(mg/kg) X 动物 B的 Km 系数/动物 A的 Km 系数

5 关于产品到货处理及验收

您收到产品后,请及时查验产品的包装完整性,并对数量进行确认。对于很多微量的产品,数量低于 500MG 的,我们出厂前都是保证正确数量包装的。由于产品包装可能在运输过程中倒置,从而导致产品附着在管壁或者盖子上,这时候请不要先打开盖子,需正位放置轻轻拍打,使产品沉降到官底。对于液体产品,可以在 200 转左右稍作离心,官底收集液体,从而避免损失。

产品标签标示重量会有一定成了误差,在下面范围内均属于我司正常范围,望周知

标示重量范围	误差范围
1-20MG	0.1MG
50-500MG	1MG
>1G	3-5MG

为什么会看起来包装瓶是空的,如果您购买的产品的量非常小,同时有些产品在冻干的过程中粘附在管壁上形成薄薄的一层,可能观察不到产品的存在。您可以加入指定溶剂(参照操作手册)并涡旋或超声震荡使之完全溶解。

对于蜡状或油状的的产品很难取出称量它们的质量,我们建议您用合适的溶剂直接溶解该化合物;对于具有吸湿性的化合物,暴露在空气中会吸收水分,呈现液滴状,这种产品需要放置在干燥器中保存。

