

产品名称：多球壳菌素

生物活性：				
Description	Myriocin (Thermozymocidin), a fungal metabolite could be isolated from Myriococcum albomyces, Isaria sinclairi and Mycelia sterilia, is a potent inhibitor of serine-palmitoyl-transferase (SPT) and a key enzyme in de novo synthesis of sphingolipids. Myriocin suppresses replication of both the subgenomic HCV-1b replicon and the JFH-1 strain of genotype 2a infectious HCV, with an IC50 of 3.5 µg/mL for inhibiting HCV infection ^{[1][2][3]} .			
	Serine-palmitoyl-transferase (SPT) ^[1]			
In Vitro	Myriocin (Thermozymocidin; 0-10000 nM; 96 小时) 抑制丙型肝炎病毒 (HCV) 1b 亚基因型复制子; (100 nM; 72 小时) 减少 Huh7 细胞中的鞘磷脂含量[2]. Yuanye has not independently confirmed the accuracy of these methods. They are for reference only. Myriocin 相关抗体: Cyclophilin A Antibody Cyclophilin B Antibody (YA787) Western Blot Analysis^[2] Cell Line: Huh7/Rep-Feo cells Concentration: 0, 300, and 1000 nM Incubation Time: 96 hours Result: Decreased the levels of HCV NS5A in a concentration-dependent manner.			
	Myriocin(Thermozymocidin; 0-1 mg/kg; 腹腔注射; 每日一次, 连续 5 天; 雄性 Balb/c 小鼠)通过抑制 SPT 来阻止体内鞘脂的从头合成, 并诱导肝脏中 c-myc 的表达 ^[1] 。Yuanye has not independently confirmed the accuracy of these methods. They are for reference only. Animal Model: Male Balb/c mice(22 g,7-8 weeks old) ^[1] Dosage: 0,0.1,0.3,and 1.0mg/kg Administration: Intraperitoneal injection,daily,for 5 days Result: Altered not significantly the levels of plasma alanine aminotransferase and aspartate aminotransferase. Decreased free sphinganine in a dose-dependent manner in both the liver and kidney. Decreased in the activity of liver SPT with a correlation coefficient of-0.76 Increased the expression of liver c-myc in a dose-dependent manner.			
Solvent&Solubility	细胞实验: DMSO 中的溶解度 : 2 mg/mL (4.98 mM); 超声助溶 (<60°C); 吸湿的 DMSO 对产品的溶解度有显著影响, 请使用新开封的			
	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg
		1 mM	2.4904 mL	12.4521 mL
		5 mM	-	-
		10 mM	-	-
	*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液; 一旦配成溶液, 请分装保存, 避免反复冻融造成的产品失效。			

	储备液的保存方式和期限：-80°C, 6 months; -20°C, 1 month。-80°C 储存时，请在 6 个月内使用，-20°C 储存时，请在 1 个月内使用。 动物实验： 请根据您的 实验动物和给药方式 选择适当的溶解方案： 以下溶解方案都请先按照 In Vitro 方式配制澄清的储备液，再依次添加助溶剂 ——为保证实验结果的可靠性，澄清的储备液可以根据储存条件，适当保存；体内实验的工作液，建议您现用现配，当天使用； 以下溶剂前显示的百分比是指该溶剂在您配制终溶液中的体积占比；如在配制过程中出现沉淀、析出现象，可以通过加热和/或超声的方式助溶 1.请依序添加每种溶剂： 10% DMSO→ 90% (20% SBE-β-CD in Saline) Solubility: ≥ 0.29 mg/mL (0.72 mM); 澄清溶液 此方案可获得 ≥ 0.29 mg/mL（饱和度未知）的澄清溶液。 以 1 mL 工作液为例，取 100 μL 2.9 mg/mL 的澄清 DMSO 储备液加到 900 μL 20% 的 SBE-β-CD 生理盐水水溶液 中，混合均匀。 2 g SBE-β-CD（磺丁基醚 β-环糊精）粉末定容于 10 mL 的生理盐水中，完全溶解至澄清透明。 2.请依序添加每种溶剂： 10% DMSO →90% Corn Oil Solubility: ≥ 0.29 mg/mL (0.72 mM); 澄清溶液 此方案可获得 ≥ 0.29 mg/mL（饱和度未知）的澄清溶液，此方案实验周期在半个月以上的动物实验酌情使用。 以 1 mL 工作液为例，取 100 μL 2.9 mg/mL 的澄清 DMSO 储备液加到 900 μL 玉米油中，混合均匀。 以下溶解方案，请直接配制工作液。建议现用现配，在短期内尽快用完。 以下溶剂前显示的百分比是指该溶剂在您配制终溶液中的体积占比； 如在配制过程中出现沉淀、析出现象，可以通过加热和/或超声的方式助溶 请依序添加每种溶剂： 50% PEG300 → 50% Saline Solubility: 5 mg/mL (12.45 mM); 悬浊液; 超声助溶				
Cellular Effect	Cell Line	Type	Value	Description	References
	MCF7	EC ₅₀	0.0495 μM	Inhibition of SPT1 in human MCF7 cells assessed as suppression of 14C-serine incorporation into ceramide incubated for 2 hrs in presence of 4-HPR	[PMID: 27213958]
	T-cell	IC ₅₀	3 nM	Immunosuppressive activity in BALB/c/C57BL/6 mouse T cells assessed as inhibition of alloantigen-induced cell proliferation after 96 hrs by measuring [3H]thymidine uptake by mixed lymphocyte reaction assay	[PMID: 21456524]
References	[1]. He Q, et, al. Inhibition of serine palmitoyltransferase by myriocin, a natural mycotoxin, causes induction of c-myc in mouse liver. Mycopathologia. 2004 Apr;157(3):339-47. [Content Brief] [2]. Amemiya F, et, al. Targeting lipid metabolism in the treatment of hepatitis C virus infection. J Infect Dis. 2008 Feb 1;197(3):361-70. [Content Brief] [3]. Ciesek S, et, al. The suppressive effect that myriocin has on hepatitis C virus RNA replication is independent of inhibition of serine palmitoyl transferase. J Infect Dis. 2008 Oct 1;198(7):1091-3. [Content Brief]				

完整储备液配制表

请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液；一旦配成溶液，请分装保存，避免反复冻融造成的

产品失效。

储备液的保存方式和期限：-80° C, 6 months; -20° C, 1 month。-80° C 储存时，请在 6 个月内使用，-20° C 储存时，请在 1 个月内使用

Preparing Stock Solutions	Solvent / Mass Concentration	1 mg	5 mg	10 mg	25 mg
	1 mM	2.4904 mL	12.4521 mL	24.9041 mL	62.2603 mL