

产品名称: Thiomyristoyl
产品别名: Thiomyristoyl

生物活性:					
Description	Thiomyristoyl is a potent and specific SIRT2 inhibitor with an IC50 of 28 nM.				
IC50 & Target	SIRT2	SIRT1			
	28 nM (IC50)	98 μM (IC50)			
In Vitro	Thiomyristoyl (TM) is a potent SIRT2-specific inhibitor with broad anticancer activity but little effect on non-cancerous cells. SIRT2-inhibition promotes c-Myc ubiquitination and degradation, suggesting the therapeutic potential of TM to target certain c-Myc-driven cancers. TM could inhibit SIRT2 with an IC50 of 28 nM, but inhibits SIRT1 with an IC50 value of 98 μM and does not inhibit SIRT3 even at 200 μM. TM inhibits three human breast cancer cell lines, MCF-7, MDA-MB-468, and MDA-MB-231[1].				
In Vivo	TM inhibits tumor growth in mouse models of breast cancer. TM does not cause significant toxicity in mice and no significant weight loss is observed in TM-treated mice. S5H, the acetyl-a-tubulin level is moderately but statistically significantly increased in tumors from TM-treated mice compared with those from vehicle-treated mice, suggesting that TM indeed inhibits SIRT2 in vivo[1].				
Solvent&Solubility	In Vitro: DMSO : ≥ 32 mg/mL (55.00 mM) * "≥" means soluble, but saturation unknown.				
	<div>Preparing Stock Solutions</div>	<div>Solvent / Mass / Concentration</div>	1 mg	5 mg	10 mg
		1 mM	1.7187 mL	8.5933 mL	17.1866 mL
		5 mM	0.3437 mL	1.7187 mL	3.4373 mL
		10 mM	0.1719 mL	0.8593 mL	1.7187 mL
	*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℃, 6 months; -20℃, 1 month。 -80℃ 储存时，请在 6 个月内使用，-20℃ 储存时，请在 1 个月内使用。				
	In Vivo: 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→40% PEG300 →5% Tween-80 → 45% saline Solubility: ≥ 2.5 mg/mL (4.30 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (4.30 mM，饱和度未知) 的澄清溶液。 以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 400 μL PEG300 中，混合均匀；向上述体系中加入 50 μL Tween-80，混合均匀；然后继续加入 450 μL 生理盐水定容至 1 mL。				
	2.请依序添加每种溶剂： 10% DMSO →90% corn oil Solubility: ≥ 2.5 mg/mL (4.30 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (4.30 mM，饱和度未知) 的澄清溶液，此方案不适用于实验周期在半个月以上的				

	<p>实验。</p> <p>以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 900 μL 玉米油中，混合均匀。</p>
References	<p>[1]. Jing H, et al. <u>A SIRT2-Selective Inhibitor Promotes c-Myc Oncoprotein Degradation and Exhibits Broad Anticancer Activity</u>. Cancer Cell. 2016 Mar 14;29(3):297-310.</p>
实验参考：	
Cell Assay	<p>Cells are seeded into 96-well plates at 3,000–4,000 cells per well. After 24 hr, test compounds (Thiomyristoyl) are added to cells to final concentrations ranging from 1 to 50 μM. Cells are then incubated for 72 hr and cell viability is measured using the CellTiter-Blue viability assay. Relative cell viability in the presence of test compounds is normalized to the vehicle-treated controls after background subtraction. GraphPad Prism software is used to determine the IC50 values. Knockdown of SIRT1-7 in various cell lines is achieved by lentiviral infection[1].</p>
References	<p>[1]. Jing H, et al. <u>A SIRT2-Selective Inhibitor Promotes c-Myc Oncoprotein Degradation and Exhibits Broad Anticancer Activity</u>. Cancer Cell. 2016 Mar 14;29(3):297-310.</p>



源叶生物