



上海源叶生物科技有限公司
Shanghai Yuanye Bio-Technology Co., Ltd
电话: 021-61312973 传真: 021-55068248
网址: www.shyuanye.com
邮箱: shyysw@sina.com

产品名称: (S)-Gossypol (acetic acid)
产品别名: (S)-(+)-Gossypol acetic acid

生物活性:

Description	(S)-Gossypol is the isomer of a natural product Gossypol. (S)-Gossypol binds to the BH3-binding groove of Bcl-xL and Bcl-2 proteins with high affinity.																				
IC₅₀ & Target	Bcl-2	Bcl-xL																			
In Vitro	The natural racemic Gossypol has two enantiomers, namely the (-)-Gossypol and (S)-Gossypol ((+)-Gossypol) enantiomers. (+)-Gossypol and (-)-Gossypol binds to Bcl-2 or Bcl-xL with similar binding affinities. (-)-Gossypol is more potent than (+)-Gossypol in inhibition of cell growth and induction of apoptosis. The racemic form and each of the enantiomers of Gossypol are tested against UM-SCC-6 and UM-SCC-14A in 6-day MTT assays. (-)-Gossypol exhibits greater growth inhibition relative to (±)-Gossypol than (+)-Gossypol in both cell lines tested ($P<0.001$). An intermediate growth inhibitory effect is observed with (±)-Gossypol but this effect is only observed at the higher dose of Gossypol (10 μ M, $P<0.0001$)[1].																				
Solvent&Solubility	<p>In Vitro:</p> <p>DMSO : 50 mg/mL (86.41 mM; Need ultrasonic)</p> <p>H₂O : < 0.1 mg/mL (insoluble)</p> <table border="1"><thead><tr><th rowspan="2">Preparing Stock Solutions</th><th>Solvent / Mass Concentration</th><th>1 mg</th><th>5 mg</th><th>10 mg</th></tr></thead><tbody><tr><td>1 mM</td><td>1.7283 mL</td><td>8.6414 mL</td><td>17.2828 mL</td></tr><tr><td>5 mM</td><td>0.3457 mL</td><td>1.7283 mL</td><td>3.4566 mL</td></tr><tr><td>10 mM</td><td>0.1728 mL</td><td>0.8641 mL</td><td>1.7283 mL</td></tr></tbody></table> <p>*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。</p> <p>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。</p> <p>In Vivo:</p> <p>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:</p> <p>——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</p> <p>1. 请依序添加每种溶剂: 10% DMSO → 40% PEG300 → 5% Tween-80 → 45% saline</p> <p>Solubility: ≥ 2.5 mg/mL (4.32 mM); Clear solution</p> <p>此方案可获得 ≥ 2.5 mg/mL (4.32 mM, 饱和度未知) 的澄清溶液。</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 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。</p>				Preparing Stock Solutions	Solvent / Mass Concentration	1 mg	5 mg	10 mg	1 mM	1.7283 mL	8.6414 mL	17.2828 mL	5 mM	0.3457 mL	1.7283 mL	3.4566 mL	10 mM	0.1728 mL	0.8641 mL	1.7283 mL
Preparing Stock Solutions	Solvent / Mass Concentration	1 mg	5 mg	10 mg																	
	1 mM	1.7283 mL	8.6414 mL	17.2828 mL																	
5 mM	0.3457 mL	1.7283 mL	3.4566 mL																		
10 mM	0.1728 mL	0.8641 mL	1.7283 mL																		
References	[1]. Oliver CL, et al. In vitro effects of the BH3 mimetic, (-)-Gossypol, on head and neck squamous cell carcinoma cells. Clin Cancer Res. 2004 Nov 15;10(22):7757-63.																				
实验参考:																					



上海源叶生物科技有限公司
Shanghai Yuanye Bio-Technology Co., Ltd
电话: 021-61312973 传真: 021-55068248
网址: www.shyuanye.com
邮箱: shyysw@sina.com

Cell Assay	Two representative UM-SCC cell lines, UM-SCC-6 and UM-SCC-14A, are continuously exposed to 0 (vehicle control), 5 or 10 μ M (\pm)-Gossypol, (-)-Gossypol or (S)-Gossypol ((+)-Gossypol) in a 6-day MTT cell survival assay[1].
References	[1]. Oliver CL, et al. In vitro effects of the BH3 mimetic, (-)-Gossypol, on head and neck squamous cell carcinoma cells. Clin Cancer Res. 2004 Nov 15;10(22):7757-63.



源叶生物