



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: VT-464 (racemate)
产品别名: Seviteronel racemate

生物活性:

Description	Seviteronel racemate (VT-464 racemate) is the racemate form of Seviteronel (VT-464), which is a potent CYP17 lyase inhibitor(h-Lyase IC ₅₀ =nM)inhibition.																				
IC₅₀ & Target	IC50: 69 nM(VT-464, h-CYP17 Lyase) ^[1] .																				
In Vitro	Seviteronel (VT-464), a non-steroidal small molecule inhibits androgen production without mineralocorticoid excess or cortisol depletion by selective inhibition of CYP17 17,20-lyase. We determined the impact of Seviteronel on tumor growth of a mCRPC xenograft, MDA-PCa-133, in vivo, and on androgen signaling in C4-2B prostate cancer cells in vitro [2].																				
In Vivo	The MDA-PCa-133 xenograft is derived from a clinical CRPC bone metastasis. Subcutaneous MDA-PCa-133 tumor expresses PSA, full-length androgen receptor (AR) and AR-V7 isoform. We determined the effect of Seviteronel (VT-464) and AA on MDA-PCa-133 growing in tumor-bearing castrated male mice: randomization into three groups; oral treatment with vehicle only, Seviteronel (VT-464), (100 mg/kg bid), or AA (100 mg/kg bid) for 25 days. Both Seviteronel (VT-464) and AA reduced tumor volume (>two fold compared to vehicle; p<0.05). These results indicate that selective Seviteronel (VT-464) CYP17 lyase inhibition is as effective as AA CYP17 inhibition in this model [2].																				
Solvent&Solubility	<p>In Vitro:</p> <p>DMSO : 50 mg/mL (125.21 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>2.5041 mL</td><td>12.5207 mL</td><td>25.0413 mL</td></tr><tr><td>5 mM</td><td>0.5008 mL</td><td>2.5041 mL</td><td>5.0083 mL</td></tr><tr><td>10 mM</td><td>0.2504 mL</td><td>1.2521 mL</td><td>2.5041 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: ≥ 3 mg/mL (7.51 mM); Clear solution</p> <p>此方案可获得 ≥ 3 mg/mL (7.51 mM, 饱和度未知) 的澄清溶液。</p> <p>以 1 mL 工作液为例, 取 100 μL 30.0 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	2.5041 mL	12.5207 mL	25.0413 mL	5 mM	0.5008 mL	2.5041 mL	5.0083 mL	10 mM	0.2504 mL	1.2521 mL	2.5041 mL
Preparing Stock Solutions	Solvent / Mass Concentration	1 mg	5 mg	10 mg																	
	1 mM	2.5041 mL	12.5207 mL	25.0413 mL																	
5 mM	0.5008 mL	2.5041 mL	5.0083 mL																		
10 mM	0.2504 mL	1.2521 mL	2.5041 mL																		



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

	<p>2.请依序添加每种溶剂: 10% DMSO → 90% corn oil Solubility: ≥ 3 mg/mL (7.51 mM); Clear solution 此方案可获得 ≥ 3 mg/mL (7.51 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实验。 以 1 mL 工作液为例, 取 100 μL 30.0 mg/mL 的澄清 DMSO 储备液加到 900 μL 玉米油中, 混合均匀。</p>
References	[1]. Rafferty SW, et al. Highly-selective 4-(1,2,3-triazole)-based P450c17a 17,20-lyase inhibitors. <i>Bioorg Med Chem Lett.</i> 2014 Jun 1;24(11):2444-7. [2]. Sankar N. Maity, et al. Abstract 4772: Efficacy of VT-464, a novel selective inhibitor of cytochrome P450 17,20-lyase, in castrate-resistant prostate cancer models. <i>Cancer Research</i> : April 15, 2013; Volume 73, Issue 8, Supplement 1



源叶生物