

产品名称: **Varespladib (LY315920)**

产品别名: 伐瑞拉迪

生物活性:

Description	Varespladib (LY315920) is a potent and selective group IIA, secretory phospholipase A2 (sPLA2) inhibitor with an IC50 of 9 nM. Varespladib exhibits the significant inhibitory effect on sPLA2 activity in serum from various species including rat, rabbit, guinea pig and human with IC50s of 8.1 nM, 5.0 nM, 3.2 nM and 6.2 nM, respectively[1].			
IC50 & Target	sPLA2			
	9 nM (IC50)			
In Vitro	Varespladib (10 μM; 24 and 48 hours; HCjE cells) treatment results in complete inhibition of the RA-induced increase in MUC16 protein detected in cell lysates at both time points[2].			
	Varespladib (10 μM; 24 and 48 hours; HCjE cells) treatment significantly inhibits RA-induced MUC16 expression by 100% at 24 hours and 99% at 48 hours[2].			
	Western Blot Analysis[2]			
	Cell Line:	HCjE cells		
	Concentration:	10 μM		
	Incubation Time:	24 hours and 48 hours		
	Result:	Significantly inhibited the RA-induced MUC16 protein expression at both time points.		
	RT-PCR[2]			
	Cell Line:	HCjE cells		
	Concentration:	10 μM		
	Incubation Time:	24 hours and 48 hours		
	Result:	Significantly inhibited RA-induced MUC16 expression by 100% at 24 hours and 99% at 48 hours.		
In Vivo	Varespladib treatment inhibits human sPLA2-induced release of thromboxane A2 (TXA2) from isolated guinea pig lung bronchoalveolar lavage cells with an IC50 of 0.79 μM. And the ED50 for Varespladib is 16.1 mg/kg.			
	Animal Model:	Male Hartley guinea pigs (300-500 g)[1]		
	Dosage:	3 mg/kg, 10 mg/kg, and 30 mg/kg		
	Administration:	Intravenous injection (Pharmacokinetic study)		
	Result:	Consistent inhibition of sPLA2 activity in BAL fluid was observed. Reduced the human sPLA2-induced generation of TXA2 on BAL cells from guinea pigs.		
<b>In Vitro:</b>				
DMSO : ≥ 32 mg/mL (84.12 mM)				
H2O : < 0.1 mg/mL (insoluble)				
* "≥" means soluble, but saturation unknown.				
Preparing Stock Solutions	<div>Solvent / Mass / Concentration</div>	1 mg	5 mg	10 mg
	1 mM	2.6289 mL	13.1444 mL	26.2888 mL
	5 mM	0.5258 mL	2.6289 mL	5.2578 mL
	10 mM	0.2629 mL	1.3144 mL	2.6289 mL

<p><b>Solvent&amp;Solubility</b></p>	<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℃，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。</p> <p><b><i>In Vivo:</i></b></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 <b>In Vitro</b> 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 Solubility: ≥ 2.5 mg/mL (6.57 mM); Clear solution</p> <p>此方案可获得 ≥ 2.5 mg/mL (6.57 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> <p>2.请依序添加每种溶剂： 10% DMSO→ 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.57 mM); Clear solution</p> <p>此方案可获得 ≥ 2.5 mg/mL (6.57 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 900 μL 20% 的 SBE-β-CD 生理盐水水溶液中，混合均匀。</p> <p>3.请依序添加每种溶剂： 10% DMSO →90% corn oil Solubility: ≥ 2.5 mg/mL (6.57 mM); Clear solution</p> <p>此方案可获得 ≥ 2.5 mg/mL (6.57 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。</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>
<p><b>References</b></p>	<p>[1]. Snyder DW, et al. Pharmacology of LY315920/S-5920, [[3-(aminooxoacetyl)-2-ethyl-1-(phenylmethyl)-1H-indol-4-yl]oxy] acetate, a potent and selective secretory phospholipase A2 inhibitor: A new class of anti-inflammatory drugs, SPI. J Pharmacol Exp Ther. 1999 Mar;288(3):1117-24.</p> <p>[2]. Hori Y, et al. Effect of retinoic acid on gene expression in human conjunctival epithelium: secretory phospholipase A2 mediates retinoic acid induction of MUC16. Invest Ophthalmol Vis Sci. 2005 Nov;46(11):4050-61.</p>