

产品名称: LDN-214117

产品别名: LDN-214117

生物活性:				
Description	LDN-214117 is a potent and selective ALK2 inhibitor with IC50 of 22 nM; > 100 fold selectivity for ALK5; also inhibits BMP6(IC50=100 nM). IC50 value: 22 nM(ALK2) [1] Target: ALK2 inhibitor LDN-214117 is a highly BMP selective compound, significantly biased toward ALK2 and its cognate ligands including BMP6 and also demonstrates a high degree of kinome selectivity and low cytotoxicity. LDN-214117 may be useful as highly selective probes of BMP-mediated cellular physiology that may provide a useful complement to the dorsomorphin class of compounds. Furthermore, this class of BMP inhibitors offers a structurally distinct template for the development of therapeutics for the treatment of BMP signaling-mediated diseases such as FOP.			
Solvent&Solubility	In Vitro: DMSO : ≥ 100 mg/mL (238.37 mM) * "≥" means soluble, but saturation unknown.			
	<div>Preparing Stock Solutions</div>	<div>Solvent / Mass Concentration</div>	1 mg	5 mg
		1 mM	2.3837 mL	11.9184 mL
		5 mM	0.4767 mL	2.3837 mL
		10 mM	0.2384 mL	1.1918 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°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。 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 (5.96 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (5.96 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% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.96 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (5.96 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 900 μL 20% 的 SBE-β-CD 生理盐水水溶液中, 混合均匀。			
	3.请依序添加每种溶剂: 10% DMSO →90% corn oil Solubility: ≥ 2.5 mg/mL (5.96 mM); Clear solution			

	<p>此方案可获得 ≥ 2.5 mg/mL (5.96 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>
References	<p>[1]. Mohedas AH, et al. <u>Structure-activity relationship of 3,5-diaryl-2-aminopyridine ALK2 inhibitors reveals unaltered binding affinity for fibrodysplasia ossificans progressiva causing mutants</u>. J Med Chem. 2014 Oct 9;57(19):7900-15.</p>



源叶生物