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产品名称: **N-2-萘基-N'-[2-氧代-2-(1-吡咯烷基)乙基]脲**  
产品别名: **XY1**

生物活性:				
Description	XY1 is a very close analogue of SGC707 (a potent, selective, and non-competitive inhibitor of PRMT3 with IC50 of 31 nM), but XY1 is completely inactive. Target: PRMT3 XY1 is a close analogue of SGC707, is completely inactive against PRMT3 at concentrations as high as 100 $\mu$ M. XY1 contains a naphthyl group replacing the isoquinoline group, lacks the key hydrogen bond with T466. The naphthyl ring of XY1 could act as a weak hydrogen-bond acceptor, but this should come with a substantial enthalpic penalty. The more than 1000-fold potency loss of XY1 compared with SGC707 supports this analysis. It is unclear whether other factors such as electronic effects also contributed to the potency loss of XY1 compared with SGC707. SGC707 and XY1 are a pair of excellent tools for the biomedical community to further elucidate biological functions and disease associations of PRMT3.			
	<b>In Vitro:</b> <b>DMSO : 67.5 mg/mL (227.01 mM; Need ultrasonic)</b>			
Solvent&Solubility	Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg
		1 mM	3.3630 mL	16.8152 mL
		5 mM	0.6726 mL	3.3630 mL
		10 mM	0.3363 mL	1.6815 mL
	<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><b>In Vivo:</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 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: <math>\geq 2.25</math> mg/mL (7.57 mM); Clear solution</p> <p>此方案可获得 <math>\geq 2.25</math> mg/mL (7.57 mM, 饱和度未知) 的澄清溶液。</p> <p>以 1 mL 工作液为例，取 100 <math>\mu</math>L 22.5 mg/mL 的澄清 DMSO 储备液加到 400 <math>\mu</math>L PEG300 中，混合均匀向上述体系中加入 50 <math>\mu</math>L Tween-80，混合均匀；然后继续加入 450 <math>\mu</math>L 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-<math>\beta</math>-CD in saline)</p> <p>Solubility: <math>\geq 2.25</math> mg/mL (7.57 mM); Clear solution</p> <p>此方案可获得 <math>\geq 2.25</math> mg/mL (7.57 mM, 饱和度未知) 的澄清溶液。</p> <p>以 1 mL 工作液为例，取 100 <math>\mu</math>L 22.5 mg/mL 的澄清 DMSO 储备液加到 900 <math>\mu</math>L 20% 的 SBE-<math>\beta</math>-CD 生理盐水水溶液中，混合均匀。</p>			



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	<p>3.请依序添加每种溶剂: 10% DMSO →90% corn oil</p> <p>Solubility: <math>\geq 2.25</math> mg/mL (7.57 mM); Clear solution</p> <p>此方案可获得 <math>\geq 2.25</math> mg/mL (7.57 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 <math>\mu</math>L 22.5 mg/mL 的澄清 DMSO 储备液加到 900 <math>\mu</math>L 玉米油中, 混合均匀。</p>
References	<p>[1]. Kaniskan H?, et al. A potent, selective and cell-active allosteric inhibitor of protein arginine methyltransferase 3 (PRMT3). Angew Chem Int Ed Engl. 2015 Apr 20;54(17):5166-70.</p>



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