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产品名称: 6 - 氯-2,3 - 二氢- 5 - 甲基- N - [6 - [(2 - 甲基-3 - 吡啶基) 氧] - 3 - 吡啶基] - 1H - 呋噪- 1 - 酰胺盐酸盐

产品别名: SB 242084

### 生物活性:

<b>Description</b>	SB 242084 is a 5-HT2C receptor antagonist( $pKi=9.0$ ) that displays 158- and 100-fold selectivity over 5-HT2A and 5-HT2B receptors respectively. IC50 value: 9.0( $pKi$ ) [1] Target: 5-HT2C antagonist in vitro: SB 242084 had over 100-fold selectivity over a range of other 5-HT, dopamine and adrenergic receptors. In studies of 5-HT-stimulated phosphatidylinositol hydrolysis using SH-SY5Y cells stably expressing the cloned human 5-HT2C receptor, SB 242084 acted as an antagonist with a $pKb$ of 9.3, which closely resembled its corresponding receptor binding affinity [1]. in vivo: SB 242084 potently inhibited m-chlorophenylpiperazine (mCPP, 7 mg/kg i.p. 20 min pre-test)-induced hypolocomotion in rats, a model of in vivo central 5-HT2C receptor function, with an ID50 of 0.11 mg/kg i.p., and 2.0 mg/kg p.o. SB 242084 (0.1-1 mg/kg i.p.) exhibited an anxiolytic-like profile in the rat social interaction test, increasing time spent in social interaction, but having no effect on locomotion. SB 242084 (0.1-1 mg/kg i.p.) also markedly increased punished responding in a rat Geller-Seifter conflict test of anxiety, but had no consistent effect on unpunished responding [1].																							
<b>In Vitro:</b>  DMSO : $\geq 44$ mg/mL (111.43 mM)  * ">" means soluble, but saturation unknown.	<table border="1"><thead><tr><th rowspan="2">Preparing Stock Solutions</th><th>Solvent</th><th>Mass</th><th rowspan="2">1 mg</th><th rowspan="2">5 mg</th><th rowspan="2">10 mg</th></tr><tr><th>Concentration</th><th></th></tr></thead><tbody><tr><td></td><td>1 mM</td><td>2.5326 mL</td><td>12.6630 mL</td><td>25.3261 mL</td></tr><tr><td></td><td>5 mM</td><td>0.5065 mL</td><td>2.5326 mL</td><td>5.0652 mL</td></tr><tr><td></td><td>10 mM</td><td>0.2533 mL</td><td>1.2663 mL</td><td>2.5326 mL</td></tr></tbody></table>	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg	Concentration			1 mM	2.5326 mL	12.6630 mL	25.3261 mL		5 mM	0.5065 mL	2.5326 mL	5.0652 mL		10 mM	0.2533 mL	1.2663 mL	2.5326 mL
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<b>Solvent&amp;Solubility</b>  <b>In Vivo:</b>  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: $\geq 2.5$ mg/mL (6.33 mM); Clear solution 此方案可获得 $\geq 2.5$ mg/mL (6.33 mM, 饱和度未知) 的澄清溶液。 以 1 mL 工作液为例，取 100 $\mu$ L 25.0 mg/mL 的澄清 DMSO 储备液加到 400 $\mu$ L PEG300 中，混合均匀，向上述体系中加入 50 $\mu$ L Tween-80，混合均匀；然后继续加入 450 $\mu$ L 生理盐水定容至 1 mL。																								



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	<p>2.请依序添加每种溶剂: 10% DMSO → 90% corn oil</p> <p>Solubility: ≥ 2.5 mg/mL (6.33 mM); Clear solution</p> <p>此方案可获得 ≥ 2.5 mg/mL (6.33 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>
<b>References</b>	<p>[1]. Kennett GA, et al. SB 242084, a selective and brain penetrant 5-HT2C receptor antagonist. <i>Neuropharmacology</i>. 1997 Apr-May;36(4-5):609-20.</p> <p>[2]. Bromidge SM, et al. 6-Chloro-5-methyl-1-[2-[(2-methyl-3-pyridyl)oxy]-5-pyridyl]carbamoyl- indoline (SB-242084): the first selective and brain penetrant 5-HT2C receptor antagonist. <i>J Med Chem</i>. 1997 Oct 24;40(22):3494-6.</p> <p>[3]. Dalton GL, et al. Serotonin 1B and 2C receptor interactions in the modulation of feeding behaviour in the mouse. <i>Psychopharmacology (Berl)</i>. 2006 Mar;185(1):45-57.</p>



# 源叶生物