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产品名称: WAY-200070

产品别名: WAY-200070

**生物活性:**

<b>Description</b>	WAY-200070 is a selective estrogen receptor $\beta$ (ERR $\beta$ ) agonist with an IC <sub>50</sub> of 2.3 nM.																										
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 2.3 nM (ERR $\beta$ ), 155 nM (ERR $\alpha$ )[1]																										
<b>In Vivo</b>	Administration of WAY-200070 (30 mg/kg s.c.) causes nuclear translocation of ERR $\beta$ receptors in WT mice. Administration of WAY-200070 (30 mg/kg s.c.) produces a delayed 50% increase in dopamine in the striatum of wild type mice. WAY-200070 (30 mg/kg s.c.) reduces immobility time in the mouse tail suspension test indicating an antidepressant-like effect[1]. In gonadally intact male and female mice WAY-200070 increases agonistic behaviors such as pushing down and aggressive grooming, while leaving attacks unaffected[2]. Ovariectomized (ovx) mice treated with PPT fail to learn the socially acquired preference, while WAY-200070-treated ovx mice shows a two-fold prolonged preference for the food eaten by their demonstrator[3]. WAY-200070, shows significantly decreased anxiety-like behaviors in both the open-field and elevated plus maze and significantly less depressive-like behaviors in the forced swim test[4].																										
	<b>In Vitro:</b> <b>DMSO : <math>\geq</math> 31 mg/mL (101.27 mM)</b> * " $\geq$ " means soluble, but saturation unknown.																										
	<table border="1"><thead><tr><th rowspan="2"></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><b>Preparing</b></td><td>1 mM</td><td>3.2668 mL</td><td>16.3340 mL</td><td>32.6680 mL</td></tr><tr><td><b>Stock Solutions</b></td><td>5 mM</td><td>0.6534 mL</td><td>3.2668 mL</td><td>6.5336 mL</td></tr><tr><td></td><td>10 mM</td><td>0.3267 mL</td><td>1.6334 mL</td><td>3.2668 mL</td></tr></tbody></table>					Solvent	Mass	1 mg	5 mg	10 mg	Concentration		<b>Preparing</b>	1 mM	3.2668 mL	16.3340 mL	32.6680 mL	<b>Stock Solutions</b>	5 mM	0.6534 mL	3.2668 mL	6.5336 mL		10 mM	0.3267 mL	1.6334 mL	3.2668 mL
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<b>Solvent&amp;Solubility</b>	<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→ 90% (20% SBE-<math>\beta</math>-CD in saline)</p> <p>Solubility: <math>\geq</math> 10 mg/mL (32.67 mM); Clear solution</p> <p>此方案可获得 <math>\geq</math> 10 mg/mL (32.67 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 100.0 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>2.请依序添加每种溶剂: 10% DMSO → 90% corn oil</p> <p>Solubility: ≥ 10 mg/mL (32.67 mM); Clear solution</p> <p>此方案可获得 ≥ 10 mg/mL (32.67 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 100.0 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]. Hughes ZA, et al. WAY-200070, a selective agonist of estrogen receptor beta as a potential novel anxiolytic/antidepressant agent. <i>Neuropharmacology</i>. 2008 Jun;54(7):1136-42.</p> <p>[2]. Clipperton Allen AE, et al. Agonistic behavior in males and females: effects of an estrogen receptor beta agonist in gonadectomized and gonadally intact mice. <i>Psychoneuroendocrinology</i>. 2010 Aug;35(7):1008-22.</p> <p>[3]. Clipperton AE, et al. Differential effects of estrogen receptor alpha and beta specific agonists on social learning of food preferences in female mice. <i>Neuropsychopharmacology</i>. 2008 Sep;33(10):2362-75.</p> <p>[4]. Weiser MJ, et al. Estrogen receptor-beta agonist diarylpropionitrile: biological activities of R- and S-enantiomers on behavior and hormonal response to stress. <i>Endocrinology</i>. 2009 Apr;150(4):1817-25.</p>

#### 实验参考:

<b>Animal Administration</b>	<p>Rats: Beginning 1 wk after ovariectomy, animals are given a single daily sc injection of hydroxypropyl betacyclodextran [vehicle; 27% (wt/vol) in saline; DPN (2.0 mg/kg), S-DPN (2.0 mg/kg), R-DPN (2.0 mg/kg), WAY-200070-3 (2.0 mg/kg), or PPT (1.0 mg/kg) in a total volume of 0.2 mL. Three hours after the daily treatment injection on d 4-7, animals undergo behavioral testing[4].</p> <p>Mice: WAY-200070 is dissolved in a 10% ethanol/90% miglyol solution. WAY-200070 or vehicle is injected subcutaneously at a volume of 10 mL/kg body weight. Male ER<math>\beta</math>KO, ER<math>\alpha</math>KO (both in C57BL/6 background) and WT C57BL/6 mice are injected with vehicle or WAY-200070 (30 mg/kg s.c.). After 15 min, the animals are sacrificed and the striatum is dissected and quickly frozen in liquid nitrogen and stored at -70°C for subsequent assay[1].</p>
<b>References</b>	<p>[1]. Hughes ZA, et al. WAY-200070, a selective agonist of estrogen receptor beta as a potential novel anxiolytic/antidepressant agent. <i>Neuropharmacology</i>. 2008 Jun;54(7):1136-42.</p> <p>[2]. Clipperton Allen AE, et al. Agonistic behavior in males and females: effects of an estrogen receptor beta agonist in gonadectomized and gonadally intact mice. <i>Psychoneuroendocrinology</i>. 2010 Aug;35(7):1008-22.</p> <p>[3]. Clipperton AE, et al. Differential effects of estrogen receptor alpha and beta specific agonists on social learning of food preferences in female mice. <i>Neuropsychopharmacology</i>. 2008 Sep;33(10):2362-75.</p> <p>[4]. Weiser MJ, et al. Estrogen receptor-beta agonist diarylpropionitrile: biological activities of R- and S-enantiomers on behavior and hormonal response to stress. <i>Endocrinology</i>. 2009 Apr;150(4):1817-25.</p>