



上海源叶生物科技有限公司  
Shanghai yuanye Bio-Technology Co., Ltd  
电话: 021-61312973 传真: 021-55068248  
网址: www.shyuanye.com  
邮箱: shyysw@sina.com

产品名称: LY2183240

产品别名: LY2183240

**生物活性:**

<b>Description</b>	LY2183240 is a novel and highly potent blocker of anandamide uptake ( $IC_{50} = 270 \text{ pM}$ ). LY2183240 inhibits fatty acid amide hydrolase (FAAH) activity ( $IC_{50} = 12.4 \text{ nM}$ ). $IC_{50}$ : 270 pM (anandamide uptake); 12.4 nM (FAAH) Target: FAAH; Anandamide uptake Following i.p. administration in rats, LY2183240 increases brain anandamide concentration and exerts antinociceptive effects in formalin model of pain.																									
	<p><b>In Vitro:</b></p> <p>DMSO : 50 mg/mL (162.68 mM; Need ultrasonic)</p> <table border="1" data-bbox="446 720 1351 938"><thead><tr><th rowspan="2">Preparing Stock Solutions</th><th>Solvent / Mass</th><th>1 mg</th><th>5 mg</th><th>10 mg</th></tr><tr><th>Concentration</th><th></th><th></th><th></th></tr></thead><tbody><tr><td>1 mM</td><td>3.2536 mL</td><td>16.2681 mL</td><td>32.5362 mL</td></tr><tr><td>5 mM</td><td>0.6507 mL</td><td>3.2536 mL</td><td>6.5072 mL</td></tr><tr><td>10 mM</td><td>0.3254 mL</td><td>1.6268 mL</td><td>3.2536 mL</td></tr></tbody></table>					Preparing Stock Solutions	Solvent / Mass	1 mg	5 mg	10 mg	Concentration				1 mM	3.2536 mL	16.2681 mL	32.5362 mL	5 mM	0.6507 mL	3.2536 mL	6.5072 mL	10 mM	0.3254 mL	1.6268 mL	3.2536 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-β-CD in saline) Solubility: ≥ 2.5 mg/mL (8.13 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (8.13 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 生理盐水溶液中, 混合均匀。</p> <p>2. 请依序添加每种溶剂: 10% DMSO → 90% corn oil Solubility: ≥ 2.5 mg/mL (8.13 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (8.13 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。 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>[1]. Dickason-Chesterfield AK, et al. Pharmacological characterization of endocannabinoid transport and fatty acid amide hydrolase inhibitors. <i>Cell Mol Neurobiol</i>. 2006 Jul-Aug;26(4-6):407-23.</p> <p>[2]. Sun L, et al. Endocannabinoid activation of CB1 receptors contributes to long-lasting reversal of</p>																									



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**References**

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- [3]. Alexander JP, Cravatt BF. The putative endocannabinoid transport blocker LY2183240 is a potent inhibitor of FAAH and several other brain serine hydrolases. J Am Chem Soc. 2006 Aug 2;128(30):9699-704.
- [4]. Maione S, et al. Antinociceptive effects of tetrazole inhibitors of endocannabinoid inactivation: cannabinoid and non-cannabinoid receptor-mediated mechanisms. Br J Pharmacol. 2008 Nov;155(5):775-82.
- [5]. Pelorosso FG, et al. The endocannabinoid anandamide inhibits kinin B1 receptor sensitization through cannabinoid CB1 receptor stimulation in human umbilical vein. Eur J Pharmacol. 2009 Jan 5;602(1):176-9.
- [6]. Powers MS, et al. Effects of the novel endocannabinoid uptake inhibitor, LY2183240, on fear-potentiated startle and alcohol-seeking behaviors in mice selectively bred for high alcohol preference. Psychopharmacology (Berl). 2010 Dec;212(4):571-83.



**源叶生物**