

产品名称: Azelnidipine

产品别名: 阿折地平

生物活性:

Description	Azelnidipine(CS 905; Calblock) is a novel dihydropyridine derivative, a L-type calcium channel blocker, and an antihypertensive. IC50 value: Target: L-type calcium channel Acute administration of azelnidipine prevents a sudden drop of cardiac function after acute stress. Azelnidipine may have a protective role in inflammation associated with atherosclerosis.																									
	<p>In Vitro:</p> <p>DMSO : $\geq 100 \text{ mg/mL}$ (171.63 mM)</p> <p>H₂O : < 0.1 mg/mL (insoluble)</p> <p>* "\geq" means soluble, but saturation unknown.</p>																									
	<table border="1"><thead><tr><th rowspan="2"></th><th>Solvent / 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></tr></thead><tbody><tr><th>Preparing</th><td>1 mM</td><td>1.7163 mL</td><td>8.5815 mL</td><td>17.1630 mL</td></tr><tr><th>Stock Solutions</th><td>5 mM</td><td>0.3433 mL</td><td>1.7163 mL</td><td>3.4326 mL</td></tr><tr><th></th><td>10 mM</td><td>0.1716 mL</td><td>0.8581 mL</td><td>1.7163 mL</td></tr></tbody></table>						Solvent / Mass	1 mg	5 mg	10 mg	Concentration	Preparing	1 mM	1.7163 mL	8.5815 mL	17.1630 mL	Stock Solutions	5 mM	0.3433 mL	1.7163 mL	3.4326 mL		10 mM	0.1716 mL	0.8581 mL	1.7163 mL
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Solvent&Solubility	<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>In Vivo:</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: $\geq 2.5 \text{ mg/mL}$ (4.29 mM); Clear solution</p> <p>此方案可获得 $\geq 2.5 \text{ mg/mL}$ (4.29 mM, 饱和度未知) 的澄清溶液。</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 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。</p>																									
References	<p>[1]. Komoda H, Inoue T, Node K. Anti-inflammatory properties of azelnidipine, a dihydropyridine-based calcium channel blocker. <i>Clin Exp Hypertens.</i> 2010 Jan;32(2):121-8.</p> <p>[2]. Kain V, Kumar S, Sitasawad SL. Azelnidipine prevents cardiac dysfunction in streptozotocin-diabetic rats by reducing intracellular calcium accumulation, oxidative stress and apoptosis. <i>Cardiovasc Diabetol.</i> 2011 Nov 4;10:97.</p> <p>[3]. Takano Y, Ueyama T, Ishikura F. Azelnidipine, unique calcium channel blocker could prevent stress-induced cardiac dysfunction like α·β blocker. <i>J Cardiol.</i> 2012 Jul;60(1):18-22.</p> <p>[4]. Shimizu T, Tanaka T, Iso T et al. Azelnidipine inhibits MSX2-dependent osteogenic differentiation and matrix mineralization of vascular smooth muscle cells. <i>Int Heart J.</i> 2012;53(5):331-5.</p> <p>[5]. Ohyama T, Sato K, Kishimoto K et al. Azelnidipine is a calcium blocker that attenuates liver fibrosis and</p>																									

may increase antioxidant defence. Br J Pharmacol. 2012 Feb;165(4b):1173-87.



源叶生物