

产品名称: **BTB06584**

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生物活性:																				
Description	BTB06584 is an IF1-dependent selective inhibitor of the mitochondrial F1Fo-ATPase. Target: ATPase in vitro: BTB06584 inhibits F1Fo-ATPase activity with no effect on ΔΨm or O2 consumption. ATP consumption was decreased following inhibition of respiration, and ischaemic cell death was reduced. BTB06584 efficiency was increased by IF1 overexpression and reduced by silencing the protein. BTB06584 may represent a valuable tool to selectively inhibit mitochondrial F1Fo-ATPase activity without compromising ATP synthesis and to limit ischaemia-induced injury caused by reversal of the mitochondrial F1Fo-ATPsynthase. in vivo: BTB06584 rescues defective haemoglobin synthesis in zebrafish pinotage (pnt) mutants in which expression of the Atpif1a gene is lost.																			
	<p><b>In Vitro:</b></p> <p><b>DMSO</b> : ≥ 47 mg/mL (112.49 mM)</p> <p><b>H<sub>2</sub>O</b> : &lt; 0.1 mg/mL (insoluble)</p> <p>* "≥" means soluble, but saturation unknown.</p> <table><tr><td rowspan="4">Preparing Stock Solutions</td><td><div>SolventMassConcentration</div></td><td>1 mg</td><td>5 mg</td><td>10 mg</td></tr><tr><td>1 mM</td><td>2.3934 mL</td><td>11.9669 mL</td><td>23.9338 mL</td></tr><tr><td>5 mM</td><td>0.4787 mL</td><td>2.3934 mL</td><td>4.7867 mL</td></tr><tr><td>10 mM</td><td>0.2393 mL</td><td>1.1967 mL</td><td>2.3934 mL</td></tr></table> <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℃, 6 months; -20℃, 1 month。 -80℃ 储存时，请在 6 个月内使用，-20℃ 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 <b>In Vitro</b> 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: ≥ 2.5 mg/mL (5.98 mM); Clear solution</p> <p>此方案可获得 ≥ 2.5 mg/mL (5.98 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>				Preparing Stock Solutions	<div>SolventMassConcentration</div>	1 mg	5 mg	10 mg	1 mM	2.3934 mL	11.9669 mL	23.9338 mL	5 mM	0.4787 mL	2.3934 mL	4.7867 mL	10 mM	0.2393 mL	1.1967 mL
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References	[1]. Ivanes F, et al. The compound BTB06584 is an IF1 -dependent selective inhibitor of the mitochondrial F1 Fo-ATPase. Br J Pharmacol. 2014 Sep;171(18):4193-4206.																			