



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: CAY10433

产品别名: BML-210

**生物活性:**

<b>Description</b>	BML-210 is a novel HDAC inhibitor, and its mechanism of action has not been characterized. IC50 value: 5 $\mu$ M[1] Target: HDAC4 In vitro: Cell cycle analysis indicated that HeLa cell treatment with 20 and 30 $\mu$ M concentration of BML-210 increased the proportion of cells in G0/G1 phase, and caused accumulation in subG1, indicating that the cells are undergoing apoptosis[2]. BML-210 inhibits the growth of NB4 cells in dose- and time-dependent manner[3]. In vivo:																									
<b>IC<sub>50</sub> &amp; Target</b>	HDAC4:MEF2																									
	<b>In Vitro:</b> <b>DMSO : ≥ 30 mg/mL (88.38 mM)</b> * "≥" means soluble, but saturation unknown.																									
	<table border="1"><thead><tr><th rowspan="2">Preparing Stock Solutions</th><th>Solvent</th><th>Mass</th><th>Concentration</th><th></th></tr><tr><th></th><th>1 mg</th><th>5 mg</th><th>10 mg</th></tr></thead><tbody><tr><th>1 mM</th><td>2.9461 mL</td><td>14.7306 mL</td><td>29.4612 mL</td></tr><tr><th>5 mM</th><td>0.5892 mL</td><td>2.9461 mL</td><td>5.8922 mL</td></tr><tr><th>10 mM</th><td>0.2946 mL</td><td>1.4731 mL</td><td>2.9461 mL</td></tr></tbody></table>					Preparing Stock Solutions	Solvent	Mass	Concentration			1 mg	5 mg	10 mg	1 mM	2.9461 mL	14.7306 mL	29.4612 mL	5 mM	0.5892 mL	2.9461 mL	5.8922 mL	10 mM	0.2946 mL	1.4731 mL	2.9461 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% corn oil</p> <p>Solubility: ≥ 2.5 mg/mL (7.37 mM); Clear solution</p> <p>此方案可获得 ≥ 2.5 mg/mL (7.37 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 <math>\mu</math>L 25.0 mg/mL 的澄清 DMSO 储备液加到 900 <math>\mu</math>L 玉米油中, 混合均匀。</p>																									
<b>References</b>	<p>[1]. Nimantha Jayathilaka, et al. Inhibition of the function of class IIa HDACs by blocking their interaction with MEF2. Nucleic Acids Res. 2012 Jul; 40(12): 5378–5388.</p> <p>[2]. Veronika V. Borutinskaite, et al. Histone deacetylase inhibitor BML-210 induces growth inhibition and apoptosis and regulates HDAC and DAPC complex expression levels in cervical cancer cells. Mol Biol Rep (2012) 39:10179–10186</p>																									



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[3]. Veronika Borutinskaite, et al. The Histone Deacetylase Inhibitor BML-210 Influences Gene and Protein Expression in Human Promyelocytic Leukemia NB4 Cells via Epigenetic Reprogramming. *Int J Mol Sci.* 2015 Aug; 16(8): 18252–18269.



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