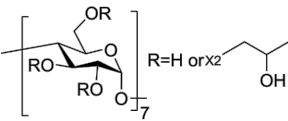


(2-Hydroxypropyl)-β-cyclodextrin

货号: **B26662**



产品信息

生物活性	(2-Hydroxypropyl)-β-cyclodextrin is a widely used drug delivery vehicle to improve the stability and bioavailability.
CAS	128446-35-5
中文名称	羟丙基-β-环糊精
分子量	
体外研究	Cell treatment with (2-Hydroxypropyl)-β-cyclodextrin results in the activation of the transcription factor E B, a master regulator of lysosomal function and autophagy, and in enhancement of the cellular autophagic clearance capacity. (2-Hydroxypropyl)-β-cyclodextrin treatment reduces intracellular cholesterol resulting in significant leukemic cell growth inhibition through G2/M cell-cycle arrest and apoptosis. The IC₅₀ values for (2-Hydroxypropyl)-β-cyclodextrin after 72 hours exposure are in the range of 3.86–10.09 mM. (2-Hydroxypropyl)-β-cyclodextrin also shows anticancer effects against CML cells expressing a T315I BCR-ABL mutation (that confers resistance to most ABL tyrosine kinase inhibitors), and hypoxia-adapted CML cells that have characteristics of leukemic stem cells. In addition, colony forming ability of human primary AML and CML cells is inhibited by (2-Hydroxypropyl)-β-cyclodextrin. The accuracy of these methods have not been independently confirmed. They are for reference only.
体内研究	
形式	Solid
运输条件	Room temperature in continental US; may vary elsewhere.
保存条件	

溶解性	In Vitro: DMSO : 50 mg/mL (Need ultrasonic) H₂O : 50 mg/mL (Need ultrasonic) In Vivo: 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： ——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 1. 请依序添加每种溶剂： Saline Solubility: 200 mg/mL (Infinity mM); Clear solution; Need ultrasonic 2. 请依序添加每种溶剂： PBS Solubility: 100 mg/mL (Infinity mM); Clear solution; Need ultrasonic and warming and heat to 60°C 3. 请依序添加每种溶剂： 10% DMSO 40% PEG300 5% Tween-80 45% saline Solubility: ≥ 2.08 mg/mL (Infinity mM); Clear solution 此方案可获得 ≥ 2.08 mg/mL (Infinity mM，饱和度未知) 的澄清溶液。 以 1 mL 工作液为例，取 100 μL 20.8 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。 将 0.9 g 氯化钠，完全溶解于 100 mL ddH₂O 中，得到澄清透明的生理盐水溶液 4. 请依序添加每种溶剂： 10% DMSO 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (Infinity mM); Clear solution 此方案可获得 ≥ 2.08 mg/mL (Infinity mM，饱和度未知) 的澄清溶液。 以 1 mL 工作液为例，取 100 μL 20.8 mg/mL 的澄清 DMSO 储备液加到 900 μL 20% 的 SBE-β-CD 生理盐水水溶液中，混合均匀。 将 2 g 磺丁基醚 β-环糊精加入 5 mL 生理盐水中，再用生理盐水定容至 10 mL，完全溶解，澄清透明 5. 请依序添加每种溶剂： 10% DMSO 90% corn oil Solubility: ≥ 2.08 mg/mL (Infinity mM); Clear solution 此方案可获得 ≥ 2.08 mg/mL (Infinity 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 20.8 mg/mL 的澄清 DMSO 储备液加到 900 μL玉米油中，混合均匀。 *以上所有助溶剂都可在 MCE 网站选购。
纯度	