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## 产品名称: Helioxanthin derivative 5-4-2

产品别名: 赛菊芋黄素衍生物 ; Helioxanthin 5-4-2

### 生物活性:

Description	Helioxanthin derivative 5-4-2 is an analogue of helioxanthin, exhibits significant <i>in vitro</i> anti-HBV activity with EC50 of 0.08 uM in HepG2.2.15 cells. IC50 value: 0.08 uM (EC50) [1][2] Target: Anti-HBV Helioxanthin derivative 5-4-2 had potent anti-HBV activities in HepG2.2.15 cells, with the EC50s of 1 and 0.08 microM, respectively. The lamivudine-resistant HBV, L526M/M550V double mutant strain, was also sensitive to helioxanthin and 5-4-2. This class of compounds not only inhibited HBV DNA, but also decreased HBV mRNA and HBV protein expression. The EC50 of HBV DNA inhibition was consistent with the EC50 of HBV 3.5 Kb transcript inhibition, which was 1 and 0.09 microM for helioxanthin and 5-4-2 respectively.																												
In Vitro:	<p>DMSO : 50 mg/mL (143.96 mM; Need ultrasonic)</p> <table border="1"><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>2.8792 mL</td><td>14.3959 mL</td><td>28.7919 mL</td><td></td></tr><tr><td>5 mM</td><td>0.5758 mL</td><td>2.8792 mL</td><td>5.7584 mL</td><td></td></tr><tr><td>10 mM</td><td>0.2879 mL</td><td>1.4396 mL</td><td>2.8792 mL</td><td></td></tr></tbody></table>					Preparing Stock Solutions	Solvent Mass	1 mg	5 mg	10 mg	Concentration				1 mM	2.8792 mL	14.3959 mL	28.7919 mL		5 mM	0.5758 mL	2.8792 mL	5.7584 mL		10 mM	0.2879 mL	1.4396 mL	2.8792 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><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 <i>In Vitro</i> 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 (7.20 mM); Clear solution</p> <p>此方案可获得 ≥ 2.5 mg/mL (7.20 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]. Yeo H, et al. Synthesis and antiviral activity of helioxanthin analogues. J Med Chem. 2005 Jan 27;48(2):534-46.</p> <p>[2]. Li Y, et al. Inhibition of hepatitis B virus gene expression and replication by helioxanthin and its derivative. Antivir Chem Chemother. 2005;16(3):193-201.</p>																												