

# 产品名称: N-1H-吡咯并[2,3-C]吡啶-5-基苯甲酰胺

产品别名: OAC1

## 生物活性:

<b>Description</b>	OAC1 is a Octamer-binding transcription factor 4 (Oct4)-activating compound; enhances the iPSC reprogramming efficiency and accelerated the reprogramming process. IC50 value: Target: Oct4 activator in vitro: OAC1 enhances the formation of Oct4-GFP+ colonies and accelerates the dynamics of reprogramming. OAC1 enhanced reprogramming efficiency through a mechanism that is independent of endogenous Oct4 promoter demethylation. OAC1 enhanced reprogramming efficiency through a mechanism that is distinct from suppressing p53-p21 expression. Luciferase assay revealed that OAC1 had no effect on Topflash activity, although BIO activated the Topflash reporter potently. OAC1 functions through a mechanism that is independent of the Wnt signaling.																				
<b>In Vitro:</b>  DMSO : ≥ 40 mg/mL (168.59 mM)  * "≥" means soluble, but saturation unknown.																					
<b>Preparing Stock Solutions</b>	<table border="1"><thead><tr><th>Solvent / Mass Concentration</th><th>1 mg</th><th>5 mg</th><th>10 mg</th></tr></thead><tbody><tr><td>1 mM</td><td>4.2148 mL</td><td>21.0739 mL</td><td>42.1479 mL</td></tr><tr><td>5 mM</td><td>0.8430 mL</td><td>4.2148 mL</td><td>8.4296 mL</td></tr><tr><td>10 mM</td><td>0.4215 mL</td><td>2.1074 mL</td><td>4.2148 mL</td></tr></tbody></table>	Solvent / Mass Concentration	1 mg	5 mg	10 mg	1 mM	4.2148 mL	21.0739 mL	42.1479 mL	5 mM	0.8430 mL	4.2148 mL	8.4296 mL	10 mM	0.4215 mL	2.1074 mL	4.2148 mL	1 mg	5 mg	10 mg	
Solvent / Mass Concentration	1 mg	5 mg	10 mg																		
1 mM	4.2148 mL	21.0739 mL	42.1479 mL																		
5 mM	0.8430 mL	4.2148 mL	8.4296 mL																		
10 mM	0.4215 mL	2.1074 mL	4.2148 mL																		
<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 <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 Solubility: ≥ 2.5 mg/mL (10.54 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (10.54 mM, 饱和度未知) 的澄清溶液。 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> <p>2. 请依序添加每种溶剂： 10% DMSO → 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (10.54 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (10.54 mM, 饱和度未知) 的澄清溶液。 以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 900 μL 20% 的 SBE-β-CD 生理盐水溶液中，混合均匀。</p> <p>3. 请依序添加每种溶剂： 10% DMSO → 90% corn oil Solubility: ≥ 2.5 mg/mL (10.54 mM); Clear solution</p>																				

	<p>此方案可获得 <math>\geq 2.5 \text{ mg/mL}</math> (<math>10.54 \text{ mM}</math>, 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 <math>1 \text{ mL}</math> 工作液为例, 取 <math>100 \mu\text{L} 25.0 \text{ mg/mL}</math> 的澄清 DMSO 储备液加到 <math>900 \mu\text{L}</math> 玉米油中, 混合均匀。</p>
<b>References</b>	[1]. Li W, et al. Identification of Oct4-activating compounds that enhance reprogramming efficiency. Proc Natl Acad Sci U S A. 2012 Dec 18;109(51):20853-8.



源叶生物