

## 产品名称: RBC8

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生物活性:																										
<b>Description</b>		RBC8 is a novel small molecule inhibitor of Ral GTPase; has IC50 of 3.5 $\mu\text{M}$ in H2122 cell and 3.4 $\mu\text{M}$ in H358 cell. IC50 value: Target: Ral GTPase inhibitor RBC8 or BQU57 treatment showed no further inhibition of colony formation after Ral knockdown. RBC8 and BQU57 showed favorable properties that define good drug candidates. To test the effect of Ral inhibitors on xenograft tumor growth, nude mice were inoculated subcutaneously with H2122 human lung cancer cells and treated intraperitoneally with 50 mg/kg/d of RBC8 for 21 days (except weekends). RBC8 inhibited tumor growth to a similar extent as dual knockdown of RaIA and RaIB.																								
<b>In Vitro:</b>		<p>DMSO : <math>\geq 40 \text{ mg/mL}</math> (94.24 mM)</p> <p>H<sub>2</sub>O : &lt; 0.1 mg/mL (insoluble)</p> <p>* "<math>\geq</math>" means soluble, but saturation unknown.</p>																								
<b>Preparing Stock Solutions</b>		<table border="1"><thead><tr><th rowspan="2"></th><th>Solvent</th><th>Mass</th><th rowspan="2">1 mg</th><th rowspan="2">5 mg</th><th rowspan="2">10 mg</th></tr><tr><th>Concentration</th><th></th></tr></thead><tbody><tr><td>1 mM</td><td>2.3560 mL</td><td>11.7800 mL</td><td>23.5599 mL</td></tr><tr><td>5 mM</td><td>0.4712 mL</td><td>2.3560 mL</td><td>4.7120 mL</td></tr><tr><td>10 mM</td><td>0.2356 mL</td><td>1.1780 mL</td><td>2.3560 mL</td></tr></tbody></table>						Solvent	Mass	1 mg	5 mg	10 mg	Concentration		1 mM	2.3560 mL	11.7800 mL	23.5599 mL	5 mM	0.4712 mL	2.3560 mL	4.7120 mL	10 mM	0.2356 mL	1.1780 mL	2.3560 mL
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<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>																										
<b>In Vivo:</b>																										
<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: <math>\geq 2.5 \text{ mg/mL}</math> (5.89 mM); Clear solution</p> <p>此方案可获得 <math>\geq 2.5 \text{ mg/mL}</math> (5.89 mM, 饱和度未知) 的澄清溶液。</p> <p>以 1 mL 工作液为例，取 100 <math>\mu\text{L}</math> 25.0 mg/mL 的澄清 DMSO 储备液加到 400 <math>\mu\text{L}</math> PEG300 中，混合均匀。向上述体系中加入 50 <math>\mu\text{L}</math> Tween-80，混合均匀；然后继续加入 450 <math>\mu\text{L}</math> 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)</p> <p>Solubility: 2.5 mg/mL (5.89 mM); Suspended solution; Need ultrasonic</p> <p>此方案可获得 2.5 mg/mL (5.89 mM) 的均匀悬浊液，悬浊液可用于口服和腹腔注射。</p> <p>以 1 mL 工作液为例，取 100 <math>\mu\text{L}</math> 25.0 mg/mL 的澄清 DMSO 储备液加到 900 <math>\mu\text{L}</math> 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</p> <p>Solubility: <math>\geq 2.5 \text{ mg/mL}</math> (5.89 mM); Clear solution</p>																										

	<p>此方案可获得 <math>\geq 2.5 \text{ mg/mL}</math> (5.89 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\text{L}</math> 25.0 mg/mL 的澄清 DMSO 储备液加到 900 <math>\mu\text{L}</math> 玉米油中，混合均匀。</p>
<b>References</b>	[1]. <a href="#">Yan C, et al. Discovery and characterization of small molecules that target the GTPase Ral. Nature. 2014 Nov 20;515(7527):443-7.</a>



源叶生物