

产品名称: **Remodelin (hydrobromide)**

产品别名: **Remodelin hydrobromide**

**生物活性:**

**Description**

Remodelin hydrobromide is a novel potent and selective inhibitor of the acetyl-transferase protein NAT10. IC50 value: Target: NAT10 inhibitor Remodelin can improve nuclear architecture, chromatin organization, and fitness of both human lamin A/C-depleted cells and HGPS-derived patient cells, and decrease markers of DNA damage in these cells. Using a combination of chemical, cellular, and genetic approaches, acetyl-transferase protein NAT10 was identified as the target of Remodelin that mediated nuclear shape rescue in laminopathic cells via microtubule reorganization. Down-regulation and mutations of the nuclear-architecture proteins lamin A and C cause misshapen nuclei and altered chromatin organization associated with cancer and laminopathies, including the premature-aging disease Hutchinson-Gilford progeria syndrome (HGPS). Remodelin is a useful chemical tool to study how NAT10 affects nuclear architecture and suggest alternative strategies for treating laminopathies and aging.

**Solvent&Solubility**

**In Vitro:**

DMSO :  $\geq 44$  mg/mL (121.12 mM)

H<sub>2</sub>O :  $< 0.1$  mg/mL (insoluble)

\* "≥" means soluble, but saturation unknown.

	Solvent	Mass	1 mg	5 mg	10 mg
	Concentration				
Preparing		1 mM	2.7527 mL	13.7635 mL	27.5270 mL
Stock Solutions		5 mM	0.5505 mL	2.7527 mL	5.5054 mL
		10 mM	0.2753 mL	1.3763 mL	2.7527 mL

\*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。

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。

**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： 10% DMSO→40% PEG300 →5% Tween-80 → 45% saline

Solubility:  $\geq 2.5$  mg/mL (6.88 mM); Clear solution

此方案可获得  $\geq 2.5$  mg/mL (6.88 mM，饱和度未知) 的澄清溶液。

以 1 mL 工作液为例，取 100  $\mu$ L 25.0 mg/mL 的澄清 DMSO 储备液加到 400  $\mu$ L PEG300 中，混合均匀。向上述体系中加入 50  $\mu$ L Tween-80，混合均匀；然后继续加入 450  $\mu$ L 生理盐水定容至 1 mL。

2.请依序添加每种溶剂： 10% DMSO→ 90% (20% SBE- $\beta$ -CD in saline)

Solubility:  $\geq 2.5$  mg/mL (6.88 mM); Clear solution

此方案可获得  $\geq 2.5$  mg/mL (6.88 mM，饱和度未知) 的澄清溶液。

以 1 mL 工作液为例，取 100  $\mu$ L 25.0 mg/mL 的澄清 DMSO 储备液加到 900  $\mu$ L 20% 的 SBE- $\beta$ -CD 生理盐水水溶液中，混合均匀。

	<p>3.请依序添加每种溶剂： 10% DMSO →90% corn oil</p> <p>Solubility: <math>\geq 2.5</math> mg/mL (6.88 mM); Clear solution</p> <p>此方案可获得 <math>\geq 2.5</math> mg/mL (6.88 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]. <a href="#">Larrieu D, et al. Chemical inhibition of NAT10 corrects defects of laminopathic cells. Science. 2014 May 2;344(6183):527-32.</a></p>



源叶生物