

产品名称: **ML324**

产品别名: **ML324**

生物活性:

Description

ML324 is a potent JMJD2 demethylase inhibitor with demonstrated antiviral activity. IC50 value: 920 nM(JMJD2E) [1] Target: JMJD2 demethylase inhibitor ML324 is a probe molecule that displays submicromolar inhibitory activity toward JMJD2E (in vitro) and possesses excellent in vitro ADME properties. In contrast to previously reported inhibitors of the JMJD proteins, ML324 displays excellent cell permeability providing an opportunity for more extensive cell-based studies of JMJD2 enzymes to be undertaken. In addition, ML324 demonstrates potent anti-viral activity against both herpes simplex virus (HSV) and human cytomegalovirus (hCMV) infection via inhibition viral IE gene expression. ML324 suppresses the formation of HSV plaques, even at high MOI, and blocks HSV-1 reactivation in a mouse ganglia explant model of latently infected mice.

In Vitro:

DMSO : ≥ 33 mg/mL (94.44 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	<div><div>Solvent</div><div>Mass</div><div>Concentration</div></div>	1 mg	5 mg	10 mg
	1 mM	2.8618 mL	14.3090 mL	28.6180 mL
	5 mM	0.5724 mL	2.8618 mL	5.7236 mL
	10 mM	0.2862 mL	1.4309 mL	2.8618 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: ≥ 2.5 mg/mL (7.15 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (7.15 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。

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

Solubility: ≥ 2.5 mg/mL (7.15 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (7.15 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 生理盐水水溶液中, 混合均匀。

References

[1]. Rai G, et al. Discovery of ML324, a JMJD2 demethylase inhibitor with demonstrated antiviral activity.