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产品名称：Ridinilazole
CAS 号：308362-25-6
产品货号：S89014

生物活性：

Description	Ridinilazole 是一种新型的抗菌剂，作用于 C. difficile，MIC 范围为 0.06-0.25 μg/mL (MIC90=8 μg/mL)。
IC50 & Target	MIC90: 8 μg/mL (C. difficile)[1]
In Vitro	Ridinilazole is a novel antibacterial that does not appear to act through the classical pathways associated with antibiotics, such as inhibition of cell wall, protein, lipid, RNA or DNA synthesis. Ridinilazole may impair cell division. Ridinilazole is bactericidal against C. difficile and exhibits a prolonged post-antibiotic effect. In susceptibility testing of 82 clinical isolates of C. difficile (including ribotype 027), Ridinilazole displays potent growth inhibition and has lower MICs [MIC range, 0.06-0.25 μg/mL; MIC for 90% of the organisms (MIC90), 0.125 μg/mL] than Metronidazole (MIC range, 0.125-8 μg/mL; MIC90, 8 μg/mL) or Vancomycin (MIC range, 0.5-4 μg/mL; MIC90, 2 μg/mL). Similarly, Ridinilazole is found to be more potent than Metronidazole or Vancomycin at inhibiting the growth of 50 ribotype-defined C. difficile strains. The activity of Ridinilazole against specific C. difficile ribotypes (including ribotypes 001, 002, 005, 014, 027, 054 and 106) is similar, with an MIC range of 0.06-0.5 μg/mL and an MIC90 of 0.125 μg/mL. In addition, Ridinilazole is more active against 11 ribotype 027 strains than either Metronidazole or Vancomycin[1]。
In Vivo	In a hamster model of CDI with a once-daily dosing regimen, Ridinilazole displays greater efficacy than Vancomycin both against non-epidemic and epidemic strains of C. difficile. Similar to the twice-daily dosing study, plasma levels of Ridinilazole are below the level of detection, whereas caecal Ridinilazole concentrations are well above the MIC, thus demonstrating the non-absorbable nature of Ridinilazole and minimal systemic exposure[1].
Solvent&Solubility	**细胞实验:** DMSO 中的溶解度 ：25 mg/mL (64.36 mM; 超声助溶 (<80°C); 吸湿的 DMSO 对产品的溶解度有显著影响，请使用新开封的 DMSO)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.5745 mL	12.8727 mL	25.7453 mL
5 mM	0.5149 mL	2.5745 mL	5.1491 mL
10 mM	0.2575 mL	1.2873 mL	2.5745 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, 2 years; -20°C, 1 year。-80°C 储存时，请在 2 年内使用， -20°C 储存时，请在 1 年内使用。

动物实验：

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

方案 一

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

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	Solubility: ≥ 2.5 mg/mL (6.44 mM); 澄清溶液 此方案可获得 ≥2.5 mg/mL（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。 2 g SBE-β-CD（磺丁基醚 β-环糊精）粉末定容于 10 mL 的生理盐水中，完全溶解至澄清透明。
参考文献	[1]. Vickers RJ, et al. Ridinilazole: a novel therapy for Clostridium difficile infection. Int J Antimicrob Agents. 2016 Aug;48(2):137-43.

完整储备液配制表：

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, 2 years; -20°C, 1 year。-80°C 储存时，请在 2 年内使用， -20°C 储存时，请在 1 年内使用。

可选溶剂	质量 / 溶剂体积 / 浓度	1 mg	5 mg	10 mg	25 mg
DMSO	**1 mM**	2.5745 mL	12.8727 mL	25.7453 mL	64.3633 mL
	5 mM	0.5149 mL	2.5745 mL	5.1491 mL	12.8727 mL
	10 mM	0.2575 mL	1.2873 mL	2.5745 mL	6.4363 mL
	15 mM	0.1716 mL	0.8582 mL	1.7164 mL	4.2909 mL
	20 mM	0.1287 mL	0.6436 mL	1.2873 mL	3.2182 mL
	25 mM	0.1030 mL	0.5149 mL	1.0298 mL	2.5745 mL
	30 mM	0.0858 mL	0.4291 mL	0.8582 mL	2.1454 mL
	40 mM	0.0644 mL	0.3218 mL	0.6436 mL	1.6091 mL
	50 mM	0.0515 mL	0.2575 mL	0.5149 mL	1.2873 mL
	60 mM	0.0429 mL	0.2145 mL	0.4291 mL	1.0727 mL