

产品名称：**Cephalexin Monohydrate (Discontinued See C256800)**

产品别名：头孢氨苄一水合物； **Cephalexin monohydrate**

生物活性：

Description

Cephalexin monohydrate is a cephalosporin antibiotic. Target: Antibacterial Cephalexin (INN, BAN) or cephalexin (USAN, AAN) is a first-generation cephalosporin antibiotic introduced in 1967 by Eli Lilly and Company. It is an orally administered agent with a similar antimicrobial spectrum to the intravenous agents cefalotin and cefazolin. It was first marketed as Keflex (Lilly), and is marketed under several other trade names. As of 2008, cephalexin was the most popular cephalosporin antibiotic in the United States, with more than 25 million prescriptions of its generic versions alone, for US\$255 million in sales (though less popular than two other antibiotics, amoxicillin and azithromycin, each with 50 million prescriptions per year). Cephalexin is marketed by generic pharmaceutical manufacturers under a wide range of brand names, including: Apo-Cephalex, Biocef, Cefanox, Ceforal, Cephabos, Cephalexin, Cephorum, Ceporex, Cilex, Ialex, Ibilex, Kefexin, Keflet, Keflex, Rekospirin, Keforal, Keftab, Keftal, Lopilexin, Larixin, Novo-Lexin, Ospexin, Tenkorex, Zephalexin, Panixine Disperdose, Rancef, Sialexin, Sporidex and Ulexin. A version of Keflex 750 mg capsules is marketed for twice-daily dosage, to improve compliance. However, it is not a sustained release formulation, and since it is more expensive than the older strengths, some physicians prescribe three 250 mg capsules to be taken twice daily, as a less expensive alternative.

In Vitro:

DMSO : 6.67 mg/mL (18.25 mM; Need ultrasonic)

H₂O : 2 mg/mL (5.47 mM; Need ultrasonic)

	Solvent	Mass	1 mg	5 mg	10 mg
	Concentration				
Preparing Stock Solutions	1 mM		2.7367 mL	13.6836 mL	27.3673 mL
	5 mM		0.5473 mL	2.7367 mL	5.4735 mL
	10 mM		0.2737 mL	1.3684 mL	2.7367 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℃，6 months；-20℃，1 month。-80℃ 储存时，请在 6 个月内使用，-20℃ 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: ≥ 0.67 mg/mL (1.83 mM); Clear solution

此方案可获得 ≥ 0.67 mg/mL (1.83 mM, 饱和度未知) 的澄清溶液。

以 1 mL 工作液为例，取 100 μL 6.7000003 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: ≥ 0.67 mg/mL (1.83 mM); Clear solution

	此方案可获得 ≥ 0.67 mg/mL (1.83 mM, 饱和度未知) 的澄清溶液。 以 1 mL 工作液为例, 取 100 μL 6.7000003 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。 3.请依序添加每种溶剂: 10% DMSO $\rightarrow$90% corn oil Solubility: ≥ 0.67 mg/mL (1.83 mM); Clear solution 此方案可获得 ≥ 0.67 mg/mL (1.83 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。 以 1 mL 工作液为例, 取 100 μL 6.7000003 mg/mL 的澄清 DMSO 储备液加到 900 μL 玉米油中, 混合均匀。
References	[1]. Speight TM, et al. Cephalexin: a review of its antibacterial, pharmacological and therapeutic properties. Drugs. 1972;3(1):9-78. [2]. Tanrisever B, et al. Cefadroxil. A review of its antibacterial, pharmacokinetic and therapeutic properties in comparison with cephalexin and cephradine. Drugs. 1986;32 Suppl 3:1-16.



源叶生物