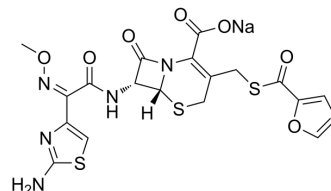


Ceftiofur sodium

| | |
|---------------------------|--|
| Cat. No.: | HY-B0898 |
| CAS No.: | 104010-37-9 |
| Molecular Formula: | C ₁₉ H ₁₆ N ₅ NaO ₇ S ₃ |
| Molecular Weight: | 545.54 |
| Target: | Bacterial; Antibiotic |
| Pathway: | Anti-infection |
| Storage: | 4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture) |



SOLVENT & SOLUBILITY

| | | | | | |
|---|---|--------------------------|--------------|-----------|------------|
| In Vitro | DMSO : 50 mg/mL (91.65 mM); ultrasonic and warming and heat to 60°C | | | | |
| | | Solvent Concentration | Mass 1 mg | 5 mg | 10 mg |
| | Preparing Stock Solutions | 1 mM | 1.8330 mL | 9.1652 mL | 18.3305 mL |
| | | 5 mM | 0.3666 mL | 1.8330 mL | 3.6661 mL |
| | | 10 mM | 0.1833 mL | 0.9165 mL | 1.8330 mL |
| Please refer to the solubility information to select the appropriate solvent. | | | | | |
| In Vivo | 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 1.67 mg/mL (3.06 mM); Clear solution; Need ultrasonic 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 1.67 mg/mL (3.06 mM); Clear solution; Need ultrasonic | | | | |

BIOLOGICAL ACTIVITY

| | |
|-------------------------------------|--|
| Description | Ceftiofurna sodium is a third-generation cephalosporin antibiotic approved for veterinary use. |
| IC₅₀ & Target | β-lactam |

CUSTOMER VALIDATION

- Nat Commun. 2020 Apr 14;11(1):1792.
- Mol Syst Biol. 2022 Sep;18(9):e11081.

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- Vet Microbiol. 2024 May, 292, 110046.

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- [1]. Dutil L, et al. Ceftiofur resistance in Salmonella enterica serovar Heidelberg from chicken meat and humans, Canada. Emerg Infect Dis. 2010 Jan;16(1):48-54.
- [2]. Yancey RJ Jr, et al. Ceftiofur sodium, a broad-spectrum cephalosporin: evaluation in vitro and in vivo in mice. Am J Vet Res. 1987 Jul;48(7):1050-3.
- [3]. Salmon SA, et al. In vitro activity of ceftiofur and its primary metabolite, desfuroylceftiofur, against organisms of veterinary importance. J Vet Diagn Invest. 1996 Jul;8(3):332-6.
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Caution: Product has not been fully validated for medical applications. For research use only.

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