Ceftriaxone sodium salt

Cat. No.: HY-B0712B
CAS No.: 74578-69-1
Molecular Formula: C₁₈H₁₆N₈Na₂O₇S₃
Molecular Weight: 598.54
Target: Bacterial; Antibiotic
Pathway: Anti-infection
Storage: 4°C, protect from light
* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

SOLVENT & SOLUBILITY

In Vitro
DMSO: 50 mg/mL (83.54 mM; Need ultrasonic)
H₂O: ≥ 40 mg/mL (66.83 mM)
* “≥” means soluble, but saturation unknown.

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Concentration</th>
<th>Mass 1 mg</th>
<th>Mass 5 mg</th>
<th>Mass 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td></td>
<td>1.6707 mL</td>
<td>8.3537 mL</td>
<td>16.7073 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td></td>
<td>0.3341 mL</td>
<td>1.6707 mL</td>
<td>3.3415 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td></td>
<td>0.1671 mL</td>
<td>0.8354 mL</td>
<td>1.6707 mL</td>
</tr>
</tbody>
</table>

Please refer to the solubility information to select the appropriate solvent.

In Vivo
1. Add each solvent one by one: PBS
   Solubility: 100 mg/mL (167.07 mM); Clear solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (4.18 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (4.18 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Ceftriaxone sodium salt (Disodium ceftriaxone) is a third-generation cephalosporin antibiotic with excellent activity against many gram-negative, and reasonable activity against most gram-positive microorganisms. Anti-inflammatory and antioxidant characteristics [1][2].

REFERENCES