**Amoxicillin sodium**

Cat. No.: HY-B0467  
CAS No.: 34642-77-8  
Molecular Formula: C₁₆H₁₈N₃NaO₅S  
Molecular Weight: 387.39  
Target: Bacterial; Antibiotic  
Pathway: Anti-infection  
Storage:  
- Powder  
  -20°C  3 years  
  4°C  2 years  
- In solvent  
  -80°C  6 months  
  -20°C  1 month

**SOLVENT & SOLUBILITY**

**In Vitro**  
H₂O : ≥ 100 mg/mL (258.14 mM)  
DMSO : 10 mg/mL (25.81 mM; Need ultrasonic)  
* "≥" means soluble, but saturation unknown.

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td></td>
<td>2.5814 mL</td>
<td>12.9069 mL</td>
<td>25.8138 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td></td>
<td>0.5163 mL</td>
<td>2.5814 mL</td>
<td>5.1628 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td></td>
<td>0.2581 mL</td>
<td>1.2907 mL</td>
<td>2.5814 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: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
   Solubility: ≥ 2.08 mg/mL (5.37 mM); Clear solution  
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
   Solubility: ≥ 1 mg/mL (2.58 mM); Clear solution  
3. Add each solvent one by one: 10% DMSO >> 90% corn oil  
   Solubility: ≥ 1 mg/mL (2.58 mM); Clear solution

**BIOLOGICAL ACTIVITY**

**Description**  
Amoxicillin sodium (Amoxycillin sodium) is a moderate-spectrum, bacteriolytic, β-lactam antibiotic. Target: Antibacterial

Amoxicillin Sodium is a moderate-spectrum, bacteriolytic, β-lactam antibiotic in the aminopenicillin family used to treat bacterial infections caused by susceptible Gram-positive and Gram-negative microorganisms. It is usually the drug of choice within the class because it is better-absorbed, following oral administration, than other β-
lactam antibiotics. Amoxicillin Sodium is susceptible to degradation by β-lactamase-producing bacteria, which are resistant to a narrow spectrum of β-lactam antibiotics, such as penicillin. For this reason, it is often combined with clavulanic acid, a β-lactamase inhibitor. This increases effectiveness by reducing its susceptibility to β-lactamase resistance. From Wikipedia.

CUSTOMER VALIDATION

- Drug Metab Pers Ther. 2020 Mar 5.

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REFERENCES


Caution: Product has not been fully validated for medical applications. For research use only.
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