Lamivudine

Cat. No.: HY-B0250
CAS No.: 134678-17-4
Molecular Formula: C₈H₁₁N₃O₃S
Molecular Weight: 229.26
Target: HIV; Reverse Transcriptase
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
DMSO : 50 mg/mL (218.09 mM; Need ultrasonic)
H₂O : ≥ 50 mg/mL (218.09 mM)
* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent</th>
<th>Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mM</td>
<td>4.3619 mL</td>
<td>21.8093 mL</td>
<td>43.6186 mL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>0.8724 mL</td>
<td>4.3619 mL</td>
<td>8.7237 mL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.4362 mL</td>
<td>2.1809 mL</td>
<td>4.3619 mL</td>
<td></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 >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (10.90 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (10.90 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (10.90 mM); Clear solution

BIological Activity

Description
Lamivudine (BCH-189) is a nucleoside reverse transcriptase inhibitors (NRTIs). Lamivudine (BCH-189) can inhibit HIV reverse transcriptase 1/2 and also the reverse transcriptase of hepatitis B virus.
REFERENCES


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