Neostigmine methyl sulfate

Cat. No.: HY-B1206
CAS No.: 51-60-5
Molecular Formula: C₁₃H₂₂N₂O₆S
Molecular Weight: 334.39
Target: AChE
Pathway: Neuronal Signaling
Storage: 4°C, protect from light
* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

**SOLVENT & SOLUBILITY**

**In Vitro**
- H₂O: 100 mg/mL (299.05 mM; Need ultrasonic)
- DMSO: ≥ 100 mg/mL (299.05 mM)

* "≥" means soluble, but saturation unknown.

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.9905 mL</td>
<td>14.9526 mL</td>
<td>29.9052 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.5981 mL</td>
<td>2.9905 mL</td>
<td>5.9810 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2991 mL</td>
<td>1.4953 mL</td>
<td>2.9905 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 >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (7.48 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (7.48 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (7.48 mM); Clear solution

**BIOLOGICAL ACTIVITY**

**Description**
Neostigmine methyl sulfate is a reversible inhibitor of acetylcholinesterase, can not cross the blood-brain barrier.

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