**Lappaconitine hydrobromide**

- **Cat. No.:** HY-N0118
- **CAS No.:** 97792-45-5
- **Molecular Formula:** C₃₂H₄₅BrN₂O₈
- **Molecular Weight:** 665.61
- **Target:** Others
- **Pathway:** Others
- **Storage:**
  - Powder: -20°C, 3 years; 4°C, 2 years
  - In solvent: -80°C, 6 months; -20°C, 1 month

**SOLVENT & SOLUBILITY**

<table>
<thead>
<tr>
<th>In Vitro</th>
<th>DMSO: 50 mg/mL (75.12 mM; Need ultrasonic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparing Stock Solutions</td>
<td></td>
</tr>
<tr>
<td>Concentration</td>
<td>Solvent</td>
</tr>
<tr>
<td>1 mM</td>
<td>1.5024 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.3005 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1502 mL</td>
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</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 (3.76 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (3.76 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (3.76 mM); Clear solution

**BIOLOGICAL ACTIVITY**

**Description**

Lappaconitine hydrobromide, a diterpene alkaloid, is a drug for the treatment of cardiac arrhythmias. IC50 value:

**Target:** A natural product for anti-cardiac arrhythmias

**In vitro:** Lappaconitine hydrobromide was found to exert an inhibitory effect on inward tetrodotoxin-sensitive sodium currents without changing their voltage dependence [1].

**In vivo:** The effect of Lappaconitine hydrobromide on aconitine-induced arrhythmias is due to modulation of genes encoding Na(+)-, K(+)-, Ca(2+)-channels, conducting ionic currents (I(Na), I(to), I(Ks), I(K1), I(CaT)), which are involved in the formation of different phases of the action potential [2]. Lappaconitine hydrobromide was found to be...
beneficial both in ventricular and supraventricular premature beats. Oral allapinine usually showed its effect 40-60 minutes following its administration, its maximum action being 4-5 hours later, its duration was some 8 hours. The optimal dose of the drug amounted to 75 mg/day [3].

REFERENCES

