Salsolidine

Cat. No.: HY-22385  
CAS No.: 5784-74-7  
Molecular Formula: C₁₂H₁₇NO₂  
Molecular Weight: 207.27  
Target: Monoamine Oxidase  
Pathway: Neuronal Signaling  
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 (241.23 mM; ultrasonic and warming and heat to 60°C)

<table>
<thead>
<tr>
<th>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>4.8246 mL</td>
<td>24.1231 mL</td>
<td>48.2462 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.9649 mL</td>
<td>4.8246 mL</td>
<td>9.6493 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.4825 mL</td>
<td>2.4123 mL</td>
<td>4.8246 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: ≥ 2.5 mg/mL (12.06 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
   Solubility: ≥ 2.5 mg/mL (12.06 mM); Clear solution

**BIOLOGICAL ACTIVITY**

**Description**  
Salsolidine is a tetrahydroisoquinoline alkaloid, acts as a stereoselective competitive MAO A inhibitor.

**IC₅₀ & Target**  
MAO A[1]

**In Vitro**  
Salsolidine is a tetrahydroisoquinoline alkaloid, acts as a stereoselective competitive MAO A inhibitor. The R-salsolidine is more active against MAO A than S-salsolidine (Kᵢ=6 μM and 186 μM, respectively)[1].  
Salsolidine weakly inhibits the binding of δ-receptor, with a Kᵢ of >100 μM[2].  
Salsolidine has the potential of inhibiting Acetylcholinesterase and butyrylcholinesterase[3].  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.
REFERENCES


Caution: Product has not been fully validated for medical applications. For research use only.
Tel: 609-228-6898       Fax: 609-228-5909       E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

See more customer validations on www.MedChemExpress.com