Allyl methyl sulfide

**Cat. No.:** HY-128447  
**CAS No.:** 10152-76-8  
**Molecular Formula:** C₄H₈S  
**Molecular Weight:** 88.17  
**Target:** Bacterial; Endogenous Metabolite  
**Pathway:** Anti-infection; Metabolic Enzyme/Protease  
**Storage:** 4°C, protect from light  
* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

**SOLVENT & SOLUBILITY**

**In Vitro**

DMSO : 100 mg/mL (1134.17 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concentration</strong></td>
<td><strong>1 mM</strong></td>
<td><strong>11.3417 mL</strong></td>
<td><strong>56.7086 mL</strong></td>
<td><strong>113.4173 mL</strong></td>
</tr>
<tr>
<td></td>
<td><strong>5 mM</strong></td>
<td><strong>2.2683 mL</strong></td>
<td><strong>11.3417 mL</strong></td>
<td><strong>22.6835 mL</strong></td>
</tr>
<tr>
<td></td>
<td><strong>10 mM</strong></td>
<td><strong>1.1342 mL</strong></td>
<td><strong>5.6709 mL</strong></td>
<td><strong>11.3417 mL</strong></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 (23.59 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
   Solubility: ≥ 2.08 mg/mL (23.59 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil  
   Solubility: ≥ 2.08 mg/mL (23.59 mM); Clear solution

**BIOLOGICAL ACTIVITY**

**Description**

Allyl methyl sulfide is a bioactive organosulfur compound found in garlic. Allyl methyl sulfide exhibits antibacterial, antioxidant and anticancer properties\(^1\).

**IC₅₀ & Target**

Human Endogenous Metabolite

**REFERENCES**