2-Hydroxy-4-methoxybenzaldehyde

Cat. No.: HY-N0445  
CAS No.: 673-22-3  
Molecular Formula: C₈H₈O₃  
Molecular Weight: 152.15  
Target: Tyrosinase  
Storage: 4°C, stored under nitrogen

* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)

**SOLVENT & SOLUBILITY**

In Vitro  
DMSO : ≥ 50 mg/mL (328.62 mM)  
H₂O : 2 mg/mL (13.14 mM; Need ultrasonic)

* "≥" 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></td>
<td>1 mM</td>
<td>6.5725 mL</td>
<td>32.8623 mL</td>
<td>65.7246 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>1.3145 mL</td>
<td>6.5725 mL</td>
<td>13.1449 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.6572 mL</td>
<td>3.2862 mL</td>
<td>6.5725 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 (16.43 mM); Clear solution

2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
   Solubility: ≥ 2.5 mg/mL (16.43 mM); Clear solution

3. Add each solvent one by one: 10% DMSO >> 90% corn oil  
   Solubility: ≥ 2.5 mg/mL (16.43 mM); Clear solution

**BIOLOGICAL ACTIVITY**

Description

2-Hydroxy-4-methoxybenzaldehyde, a chemical compound and an isomer of Vanillin, could be used to synthesis Urolithin M7[1]. 2-hydroxy-4-methoxybenzaldehyde is a potent tyrosinase inhibitor from three East African medicinal plants, Mondia whitei, Rhus vulgaris Meikle, and Sclerocarya caffra Sond[2].

IC₅₀ & Target

Tyrosinase[2].
REFERENCES


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

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