Salicylamide

Cat. No.: HY-B0811
CAS No.: 65-45-2
Molecular Formula: C₇H₇NO₂
Molecular Weight: 137.14
Target: Others
Pathway: Others
Storage: 4°C, protect from light

Solvent & Solubility

**In Vitro**
DMSO: ≥ 100 mg/mL (729.18 mM)
H₂O: 0.1 mg/mL (0.73 mM; Need ultrasonic)

<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>7.2918 mL</td>
<td>36.4591 mL</td>
<td>72.9182 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>1.4584 mL</td>
<td>7.2918 mL</td>
<td>14.5836 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.7292 mL</td>
<td>3.6459 mL</td>
<td>7.2918 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 >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (18.23 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (18.23 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (18.23 mM); Clear solution

**BIOLOGICAL ACTIVITY**

**Description**
Salicylamide is an inhibitor of microsomal UDP-glucuronosyltransferase. Salicylamide is an analgesic and anti-pyretic agent.

**In Vitro**
Treatment with salicylamides leads to the bacterial growth inhibition which correlates with the level of inhibition of sulfate reduction[1].
**In Vivo**

Salicylamide administration decreases the levels of radiosulfate in maternal serum and placenta, and impaires the incorporation of radiosulfate into fetal skeletal GAGs. Salicylamide administration results in a decrease in the calcium content of fetal limb bones, but has no significant effect on maternal serum calcium\(^2\). Salicylamide administration decreases radiosulfate uptake by maternal serum and liver, fetus and placenta—effects being dose-dependent. Differences in radiosulfate uptake by the fetus and placenta over time, induced by salicylamide, are also significant independently of maternal serum levels of radiosulfate\(^3\).

**PROTOCOL**

**Animal Administration**\(^2\)

Rats: Pregnant rats are fed 25% casein diet with or without 2% salicylamide from day 6 to day 17 or day 19 of gestation. The dams are killed on day 17 or day 19 of gestation, 24 hours following an intramuscular injection of sodium 35S-sulfate\(^2\).

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