Nicotredole

Cat. No.: HY-137394
CAS No.: 29876-14-0
Molecular Formula: C₁₆H₁₅N₃O
Molecular Weight: 265.31
Target: Others
Pathway: Others
Storage: 4°C, protect from light

* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (94.23 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Solvent Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>3.7692 mL</td>
<td>18.8459 mL</td>
<td>37.6918 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.7538 mL</td>
<td>3.7692 mL</td>
<td>7.5384 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.3769 mL</td>
<td>1.8846 mL</td>
<td>3.7692 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: ≥ 2.08 mg/mL (7.84 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (7.84 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (7.84 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Nicotredole (Tryptamide) is an orally active anti-inflammatory and analgesic agent. Nicotredole exhibits evident anti-inflammatory effects of potency comparable with Phenylbutazone. Nicotredole has only weak ulcerogenic activity[1][2][3].

In Vitro
Nicotredole inhibits prostaglandin synthetase activity in vitro[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo
Nicotredole produces anti-inflammatory effects in carrageenin-induced rat paw oedema[1].
Nicotredole reverses pyrogen-induced hyperthermia in rats, elicits analgesic effects in rats, prolongs the time of
hexobarbital sleep in rats and inhibits locomotor activity in rats and mice[1].
Nicotredole (i.p.) has LD50s of 1260 mg/kg and 1980 mg/kg for male rats and male mice, respectively[1].
Nicotredole (p.o.) has LD50s of 8.5 g/kg and 9.3 g/kg for male rats and male mice, respectively[1].
Nicotredole (25 mg/kg; p.o. or i.p.) undergoes fast absorption ($t_{1/2}=4.92-17.5$ min) and elimination ($t_{1/2}=55.72-74.52$ min),
can reach $C_{\text{max}}$ (11-13 μg/cm$^3$) after 30 min, and gives AUC values in the range of 21.40-27.30 (μg•h/cm$^3$)[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

