Solasodine

Cat. No.: HY-N0068
CAS No.: 126-17-0
Molecular Formula: C₂₇H₄₃NO₂
Molecular Weight: 413.64
Target: MDM-2/p53; Fungal; E1/E2/E3 Enzyme; Apoptosis
Pathway: Apoptosis; 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 : 2.6 mg/mL (6.29 mM; Need ultrasonic)
H₂O : 0.67 mg/mL (1.62 mM; Need ultrasonic)

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Solvent Concentration</th>
<th>Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.4176 mL</td>
<td>12.0878 mL</td>
<td>24.1756 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4835 mL</td>
<td>2.4176 mL</td>
<td>4.8351 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
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Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description
Solasodine (Purapuridine) is a steroidal alkaloid that occurs in plants of the Solanaceae family. Solasodine has neuroprotective, antifungal, hypotensive, anticancer, antiatherosclerotic, antiandrogenic and anti-inflammatory activities.

In Vitro
Solasodine (90 μM; 2 days) treatment displays significant sprouting in P19 cells. Solasodine induces strong expression of different neuronal markers studied, including βIII-tubulin, synaptophysin, MAP2, ChAT, and neuroblast marker doublecortin. Solasodine induces the differentiation of P19 cells, essentially towards the neuronal pathway. Solasodine induces apoptosis by inhibiting the p53-MDM2 complex, p21Waf1/Cip1, and Bcl-2 proteins.
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo
Solasodine (25-100 mg/kg; intraperitoneal injection; once) treatment significantly delays latency of hind limb tonic extensor (HLTE) phase in the PCT-induced convulsions. And significantly potentiates Thiopental-provoked sleep in a dose-dependent manner. Solasodine has anticonvulsant and CNS depressant activities.
Solasodine (375 μM; i.c.v.; for 2 weeks) treatment results a significant increase in bromodeoxyuridine uptake by cells of the ependymal layer, subventricular zone, and cortex that co-localized with doublecortin immunostaining. Solasodine treatment in rats results in a dramatic increase in expression of the cholesterol- and drug-binding translocator protein in...
ependymal cells\([1]\). MCE has not independently confirmed the accuracy of these methods. They are for reference only.

<table>
<thead>
<tr>
<th>Animal Model</th>
<th>Swiss albino mice (18-25 g) treated with Picrotoxin (PCT) or Thiopental([2])</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dosage</td>
<td>25 mg/kg, 50 mg/kg and 100 mg/kg</td>
</tr>
<tr>
<td>Administration</td>
<td>Intraperitoneal injection; once</td>
</tr>
<tr>
<td>Result</td>
<td>Significantly delayed latency of hind limb tonic extensor (HLTE) phase in the PCT-induced convulsions. And significantly potentiated Thiopental-provoked sleep in a dose-dependent manner.</td>
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</table>

**REFERENCES**


