Oxyphenisatin acetate

Cat. No.: HY-101714
CAS No.: 115-33-3
Molecular Formula: C₂₄H₁₉NO₅
Molecular Weight: 401.41
Target: Autophagy
Pathway: Autophagy
Storage: Powder
-20°C 3 years
4°C 2 years
In solvent
-80°C 6 months
-20°C 1 month

SOLVENT & SOLUBILITY

In Vitro
DMSO: 100 mg/mL (249.12 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Concentration</th>
<th>Mass 1 mg</th>
<th>Mass 5 mg</th>
<th>Mass 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mM</td>
<td>2.4912 mL</td>
<td>12.4561 mL</td>
<td>24.9122 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>0.4982 mL</td>
<td>2.4912 mL</td>
<td>4.9824 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.2491 mL</td>
<td>1.2456 mL</td>
<td>2.4912 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 (6.23 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.23 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Oxyphenisatin acetate, the pro-drug of oxyphenisatin, is used to be a laxative.

In Vitro
Oxyphenisatin acetate inhibits the growth of the breast cancer cell lines MCF7, T47D, HS578T, and MDA-MB-468. In the estrogen receptor (ER) positive MCF7 and T47D cells, oxyphenisatin acetate induces TNFα expression and TNFR1 degradation, indicating autocrine receptor-mediated apoptosis in these lines. Ten micromoles per liter Oxyphenisatin acetate treatment results in autophagy and mitochondrial dysfunction[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo
Oxyphenisatin acetate (300 mg/kg, i.p.) delivers intraperitoneally inhibited tumor growth, accompanied by phosphorylation of eIF2α and degradation of TNFR1 in an MCF7 xenograft model[1].
**PROTOCOL**

**Animal Administration** [1]

Assessment in several other tumor models demonstrates tolerability with oxyphenisatin acetate at 300 mg/kg given once daily or 200 mg/kg given twice daily. For the MCF-7 study treatments are administered on an exact body weight basis using dose volumes of 1-2 mL/kg body weight. The vehicle control receives 100% DMSO. The treated group receives 300 mg/kg oxyphenisatin acetate once daily for a total of 10 days, followed by a 3 day rest and an additional 6 days of dosing. The dose solutions are prepared in 100% DMSO, aliquoted and stored frozen until used. The mice are monitored for a total of 52 days with treatment initiation occurring on day 27 posttumor implantation[1].

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