**Oxyphenisatine**

**Cat. No.:** HY-B2102  
**CAS No.:** 125-13-3  
**Molecular Formula:** C₂₀H₁₅NO₃  
**Molecular Weight:** 317.34  
**Target:** Others  
**Pathway:** Others  
**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: ≥ 28 mg/mL (88.23 mM)  
*“≥” means soluble, but saturation unknown.*

<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>3.1512 mL</td>
<td>15.7560 mL</td>
<td>31.5119 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.6302 mL</td>
<td>3.1512 mL</td>
<td>6.3024 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.3151 mL</td>
<td>1.5756 mL</td>
<td>3.1512 mL</td>
</tr>
</tbody>
</table>

Please refer to the solubility information to select the appropriate solvent.

**BIOLOGICAL ACTIVITY**

**Description**  
Oxyphenisatine (Oxyphenisatin) is a laxative. Oxyphenisatin acetate is the pro-drug of oxyphenisatin with anticancer activity.

**In Vitro**  
Oxyphenisatin has been shown to have antiproliferative activity. Oxyphenisatin acetate (OXY, NSC 59687) is the pro-drug of oxyphenisatin. OXY inhibits the growth of the breast cancer cell lines MCF7, T47D, HSS78T, and MDA-MB-468 (IC₅₀=0.8, 0.6, 2.1, 1.8 μM). This effect is associated with selective inhibition of translation accompanied by rapid phosphorylation of the nutrient sensing eIF2α kinases, GCN2 and PERK[1].

**In Vivo**  
Toxicity studies demonstrate that mice tolerate IP administration of OXY at 300 mg/kg once daily or 200 mg/kg twice daily. Administration of OXY at 300 mg/kg IP once daily for 10 days results in significantly smaller tumors from day 33 to day 52[1].
Mice: When tumors reaches 120 mg, mice are randomized into treatment groups and therapy is initiated. A simple toxicity assessment to determine tolerability to OXY is conducted by administering single intraperitoneal (IP) doses of compound at 100, 200, and 400 mg/kg. The mice were observed for adverse effects for 14 days postdose. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES