1-Hydroxyanthraquinone

**Cat. No.:** HY-W000838

**CAS No.:** 129-43-1

**Molecular Formula:** C_{14}H_{8}O_{3}

**Molecular Weight:** 224.21

**Target:** DNA/RNA Synthesis

**Pathway:** Cell Cycle/DNA Damage

**Storage:**
- Powder: -20°C for 3 years, 4°C for 2 years
- In solvent: -80°C for 6 months, -20°C for 1 month

**SOLVENT & SOLUBILITY**

In Vitro

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMSO</td>
<td>1 mM</td>
<td>4.4601 mL</td>
<td>22.3005 mL</td>
<td>44.6010 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>0.8920 mL</td>
<td>4.4601 mL</td>
<td>8.9202 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.4460 mL</td>
<td>2.2301 mL</td>
<td>4.4601 mL</td>
</tr>
</tbody>
</table>

DMSO : 16.67 mg/mL (74.35 mM; Need ultrasonic)

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

**BIOLOGICAL ACTIVITY**

**Description**

1-Hydroxyanthraquinone, a naturally occurring compound with oral activity from some plants like Tabebuia avellanedae, exhibits carcinogenic effect\(^1\).

**In Vivo**

1-Hydroxyanthraquinone (HA) generates strong DNA repair response and is carcinogenic in rats\(^1\).

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

**Animal Model:** Thirty rats\(^1\).

**Dosage:** 1% HA in diet.

**Administration:** Diet.

**Result:** Associated with decreased weight gain which was particularly marked towards the termination of experiment. One of the 30 rats in group 1 (experimental group) died of pneumonia 243 days after the
A second rat died in an unnourished state at day 280, demonstrating a large tumor in the colon. Seven animals of the group died spontaneously or were sacrificed upon becoming moribund between 335 and 462 days. A total of 21 rats of group 1 survived until the end of experiment (mean value of total intake of HA/rat was 76.8 g).

REFERENCES