Elesclomol (STA-4783)

Cat. No.: A4386
CAS No.: 488832-69-5
Formula: C_{19}H_{20}N_{4}O_{2}S_{2}
M.Wt: 400.5
Synonyms: STA 4783, STA4783
Target: Proteases
Pathway: HSP
Storage: Store at -20°C

**Solvent & Solubility**

Insoluble in H2O; ≥20.15 mg/mL in DMSO; ≥5.68 mg/mL in EtOH with gentle warming and ultrasonic

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Mass</th>
<th>Solvent Concentration</th>
<th>1mg</th>
<th>5mg</th>
<th>10mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mM</td>
<td></td>
<td>2.4969 mL</td>
<td>12.4844 mL</td>
<td>24.9688 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td></td>
<td>0.4994 mL</td>
<td>2.4969 mL</td>
<td>4.9938 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td></td>
<td>0.2497 mL</td>
<td>1.2484 mL</td>
<td>2.4969 mL</td>
</tr>
</tbody>
</table>

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

**Biological Activity**

**Shortsummary**
Oxidative stress/apoptosis inducer, potent and novel

**IC_{50} & Target**

**Cell Viability Assay**

<table>
<thead>
<tr>
<th>Cell Line:</th>
<th>HSB2 cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation method:</td>
<td>The solubility of this compound in DMSO is &gt; 10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20 °C for several months.</td>
</tr>
<tr>
<td>Reacting conditions:</td>
<td>200 nM; 18 hrs</td>
</tr>
</tbody>
</table>
### In Vivo

**Applications:** In HSB2 cells, Elesclomol increased the number of early and late apoptotic cells (3.7- and 11-fold, respectively).

**Animal experiment**

<table>
<thead>
<tr>
<th>Animal models:</th>
<th>Nude mouse xenograft models of human breast cancers (MDA435, MCF7 and ZR-75-1), lung cancer (RER) or lymphoma (U937)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dosage form:</td>
<td>25 ~ 100 mg/kg; i.v.</td>
</tr>
</tbody>
</table>

**Applications:** In nude mouse xenograft models of human breast cancers (MDA435, MCF7 and ZR-75-1), lung cancer (RER) or lymphoma (U937), a single dose of Elesclomol (25 ~ 100 mg/kg) showed no antitumor activity. But Elesclomol substantially enhanced the efficacy of chemotherapeutic agents such as Paclitaxel, both in terms of tumor regression and extended survival of mice.

**Other notes:** Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

---

**Product Citations**


See more customer validations on [www.apexbt.com](http://www.apexbt.com).

---

**References**


---

**Caution**

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt
of the product, follow the storage recommendations on the product data sheet.