Scriptaid

Cat. No.: A4106  
CAS No.: 287383-59-9  
Formula: C18H18N2O4  
M.Wt: 326.35  
Synonyms:  
Target: DNA Damage/DNA Repair  
Pathway: HDAC  
Storage: Store at -20°C

Solvent & Solubility

insoluble in H2O; ≥13.1 mg/mL in DMSO; ≥3.17 mg/mL in EtOH with gentle warming and ultrasonic

<table>
<thead>
<tr>
<th>Preparing</th>
<th>Solvent</th>
<th>Mass</th>
<th>1mg</th>
<th>5mg</th>
<th>10mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td></td>
<td></td>
<td>3.0642 mL</td>
<td>15.3210 mL</td>
<td>30.6419 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td></td>
<td></td>
<td>0.6128 mL</td>
<td>3.0642 mL</td>
<td>6.1284 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td></td>
<td></td>
<td>0.3064 mL</td>
<td>1.5321 mL</td>
<td>3.0642 mL</td>
</tr>
</tbody>
</table>

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

Biological Activity

Shortsummary: HDAC inhibitor, novel and cell-permeable

IC50 & Target

Cell Viability Assay

<table>
<thead>
<tr>
<th>Cell Line:</th>
<th>MDA-MB-231 cell lines</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>48 h; 1.0 mg/mL</td>
</tr>
</tbody>
</table>
Applications: Based on MTT assay a concentration of 1mg/ml of Scriptaid was chosen for the experiments in MDA-MB-231. MDA-MB-231 cells were treated with 0.1, 0.5, and 1.0 mg/mL of Scriptaid for 48 h. A dose-dependent increase in α-ER mRNA was detectable with concentrations as low as 0.1mg/ml in MDA-MB-231. Maximal α-ER mRNA was detected at 1.0mg/ml.

Animal experiment

Animal models: B6D2F1 male and female mice; SCNT embryos
Dosage form: 250 nM; immersion
Applications: Treating SCNT embryos with HDAC inhibitor, scriptaid, all the important inbred mouse strains can be cloned, such as C57BL/6, C3H/He, DBA/2, and 129/Sv. Normal development, reproductive ability, and genotype in cloned inbred mice produced by scriptaid treatment. Scriptaid has also lower toxicity for embryo development that treatment of ICSI-fertilized embryos with 250 nM scriptaid, for up to 48 h, did not inhibit in vitro or in vivo development.

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


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. Short term 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.