Vorinostat (SAHA, MK0683)

Cat. No.: A4084
CAS No.: 149647-78-9
Formula: C14H20N2O3
M.Wt: 264.3
Synonyms: SAHA, suberoylanilide hydroxamic acid, Suberanilohydroxamic acid, SAHA cpd
Target: DNA Damage/DNA Repair
Pathway: HDAC
Storage: Store at -20°C

Solvent & Solubility

<table>
<thead>
<tr>
<th>In Vitro</th>
<th>Preparing Stock Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent</td>
<td>Concentration</td>
</tr>
<tr>
<td>EtOH</td>
<td></td>
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<td></td>
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</tbody>
</table>

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

Biological Activity

<table>
<thead>
<tr>
<th>Shortsummary</th>
<th>HDAC inhibitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC50 &amp; Target</td>
<td>~10 nM (HDAC)</td>
</tr>
</tbody>
</table>

Cell Viability Assay

<table>
<thead>
<tr>
<th>Cell Line:</th>
<th>Human cutaneous T-cell lymphomas (CTCL) 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>
</tbody>
</table>
Reacting conditions:
- IC50: 0.146 μM HH
- 2.062 μM HuT78
- 2.697 μM MJ
- 1.375 μM MylA
- 1.510 μM SeAx
- 72h

Applications:
- Vorinostat dose-dependently reduced cell proliferation with IC50 values of
  0.146 μM, 2.062 μM, 2.697 μM, 1.375 μM and 1.510 μM in HH, HuT78, MJ,
  MylA and SeAx cells, respectively.

### Animal experiment

**Animal models:**
- C57BL/6 mice bearing Eμ-myc lymphomas

**Dosage form:**
- C57BL/6 mice bearing Eμ-myc lymphomas were injected with vorinostat (200 mg/kg i.p.) and lymphoma cells were harvested after the indicated time points.

**Applications:**
- The percentage of tumor cells in the lymph node of C57BL/6 mice bearing
  Eμ-myc lymphomas treated with vorinostat was determined by FACS analysis.

**Other notes:**
- Vorinostat induced a marked accumulation of Eμ-myc lymphomas displaying
  DNA fragmentation in vivo.

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.

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**Product Citations**


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**References**


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**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.