**17-AAG (KOS953)**

Cat. No.: A4054  
CAS No.: 75747-14-7  
Formula: C31H43N3O8  
M.Wt: 585.7  
Synonyms: Tanespimycin  
Target: Proteases  
Pathway: HSP  
Storage: Store at -20°C  

### Solvent & Solubility

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Mass</th>
<th>Concentration</th>
<th>1mg</th>
<th>5mg</th>
<th>10mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 mM</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>5 mM</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>10 mM</td>
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</tr>
</tbody>
</table>

≥24.95 mg/mL in DMSO; insoluble in H2O; ≥9.56 mg/mL in EtOH with ultrasonic

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

### Biological Activity

**Shortsummary**  
Hsp90 inhibitor

**IC₅₀ & Target**  
5 nM (HSP90)

**Cell Viability Assay**

<table>
<thead>
<tr>
<th>Cell Line:</th>
<th>HT29, HCT116, KM12 and HCT15 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>IC₅₀: 0.2 μM (HT29), 0.8 μM (HCT116), 0.9 μM (KM12) and 46 μM (HCT15)</td>
</tr>
</tbody>
</table>

Product Name: 17-AAG (KOS953)  
Revision Date: 01/10/2021
Applications: The cells were treated with a range of 17-AAG concentrations for 24 h and then cultured in the absence of 17-AAG for an additional 48 h. 17-AAG showed antitumor activity in these four human colon adenocarcinoma cell lines and reduced cell viabilities dose-dependently. The IC50 values for HT29, HCT116, KM12 and HCT15 cells are 0.2, 0.8, 0.9 and 46 μM, respectively.

In Vivo

Animal experiment

<table>
<thead>
<tr>
<th>Animal models:</th>
<th>Old nu/nu athymic mice (male with CWR22 xenograft, female with CWR22R or CWRSA6 xenograft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dosage form:</td>
<td>Intraperitoneal injection, 50 mg/kg</td>
</tr>
<tr>
<td>Applications:</td>
<td>Both continuous and intermittent dosing schedules were studied. The “continuous” dosing schedule involved exposure to drug 5 days/week for 3 consecutive weeks. In the “intermittent” schedule, mice were treated with one 5-day cycle and then monitored for tumor progression. At progression, mice were treated with a second 5-day cycle of drug. Both regimens caused a dose-dependent delay in xenograft tumor growth in all three models. With the continuous schedule, 50 mg/kg 17-AAG caused 80% growth inhibition of CWRSA6 tumor growth when assessed on the day the controls required sacrifice. With the intermittent schedule, 17-AAG caused 87% growth inhibition of CWRSA6 tumor growth. Similar results were noted with the parental CWR22 model and with a second androgen-independent subline CWR22R.</td>
</tr>
<tr>
<td>Other notes:</td>
<td>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.</td>
</tr>
</tbody>
</table>

Product Citations


References

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 is 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.