DOXO-EMCH

Cat. No.: A3372
CAS No.: 151038-96-9
Formula: C37H42N4O13
M.Wt: 750.75
Synonyms: INNO-206; Doxorubicin-EMCH; INNO 206
Target: DNA Damage/DNA Repair
Pathway: Topoisomerase
Storage: Store at -20°C

Solvent & Solubility

Soluble in DMSO

<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>1 mM</td>
<td></td>
<td></td>
<td>1.3320 mL</td>
<td>6.6600 mL</td>
<td>13.3200 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td></td>
<td></td>
<td>0.2664 mL</td>
<td>1.3320 mL</td>
<td>2.6640 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td></td>
<td></td>
<td>0.1332 mL</td>
<td>0.6660 mL</td>
<td>1.3320 mL</td>
</tr>
</tbody>
</table>

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

Biological Activity

Shortsummary
Prodrug of doxorubicin

IC50 & Target

Cell Viability Assay

Cell Line: Human multiple myeloma cell lines RPMI8226 and U266
Preparation method: Soluble in DMSO. 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.
Reacting conditions: 0.27-2.16 mmol/L, 48 hours
Applications: INNO-206 inhibited blood vessel formation and reduced multiple myeloma cell growth in a pH-dependent fashion. In RPMI8226 cells, INNO-206 decreased
cell viability in concentration- and pH-dependent manner. At pH5, INNO-206 (≥0.54 mmol/L) essentially eliminated cell viability. In the MM1S cell line, INNO-206 inhibited cell growth in concentration and pH-dependent manner.

Animal experiment

<table>
<thead>
<tr>
<th>Animal models:</th>
<th>Mice bearing the LAGk-1A tumor, multiple myeloma xenograft(LAGk-2) mouse model</th>
</tr>
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<tbody>
<tr>
<td>Dosage form:</td>
<td>Intravenous injection, 10.8 mg/kg; 3 times weekly at 1.8 mg/kg; once weekly at 5.4 mg/kg</td>
</tr>
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<td>Applications:</td>
<td>In mice bearing the LAGk-1A tumor, INNO-206 (10.8 mg/kg, once weekly, i.v.) showed significantly smaller tumor volumes and IgG levels on days 28, 35 and 42. In LAGk-2-bearing mice, treatment with INNO-206 (i.v. 3 times weekly at 1.8 mg/kg) significantly reduced tumor volume. INNO-206 (once weekly, 5.4 mg/kg) showed significantly smaller tumor volumes.</td>
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<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>
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In Vivo

Animal models: Mice bearing the LAGk-1A tumor, multiple myeloma xenograft(LAGk-2) mouse model

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Applications: In mice bearing the LAGk-1A tumor, INNO-206 (10.8 mg/kg, once weekly, i.v.) showed significantly smaller tumor volumes and IgG levels on days 28, 35 and 42. In LAGk-2-bearing mice, treatment with INNO-206 (i.v. 3 times weekly at 1.8 mg/kg) significantly reduced tumor volume. INNO-206 (once weekly, 5.4 mg/kg) showed significantly smaller tumor volumes.

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. Shorter 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.