Everolimus (RAD001)

Cat. No.: A8169
CAS No.: 159351-69-6
Formula: C53H83NO14
M.Wt.: 958.22
Synonyms: Everolimus, RAD001
Target: PI3K/Akt/mTOR Signaling
Pathway: mTOR
Storage: Store at -20°C

Solvent & Solubility

≥47.91 mg/mL in DMSO; insoluble in H2O; ≥122 mg/mL in EtOH

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

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

Biological Activity

Shortsummary: MTOR inhibitor
IC50 & Target: 1.6-2.4 nM (mTOR (FKBP12))

Cell Viability Assay

In Vitro

Cell Line: The pancreatic tumor cell line Panc-1 and the small cell lung cancer cell line ScLc.
Preparation method: The solubility of this compound in DMSO is >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.
Rad001 was formulated at 2% (w/v) in a microemulsion vehicle and was diluted in double-distilled water just before administration by gavage. Mice were treated with placebo (control) or 5 mg/kg of RAD001 twice weekly started from age of 5 weeks and continued to 20 weeks. Mice treated with placebo or RAD001 were scanned by MRM.

RAD001 suppressed tumorigenesis. Body weights of RAD001-treated mice were ~10% lower than in placebo-treated mice.

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

**Animal experiment**

**Animal models:** TgMISIIR-TAg-DR26 mice model of ovarian cancer

**Dosage form:** RAD001 was formulated at 2% (w/v) in a microemulsion vehicle and was diluted in double-distilled water just before administration by gavage. Mice were treated with placebo (control) or 5 mg/kg of RAD001 twice weekly started from age of 5 weeks and continued to 20 weeks. Mice treated with placebo or RAD001 were scanned by MRM.

**Applications:** RAD001 suppressed tumorigenesis. Body weights of RAD001-treated mice were ~10% lower than in placebo-treated mice.

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**Product Citations**


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**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 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.