Ginsenoside Rs3

Chemical Properties

CAS No.: 194861-70-6
Formula: C44H74O14
Molecular Weight: 827.1
Appearance: N/A
Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description
Ginsenoside Rs3 induce apoptosis, is related to the elevations of p53 and p21WAF1 in the cells.

Targets (IC50)
p53: None

In vitro
Ginsenoside Rs3 (R-S3), a new diol-type ginseng saponin isolated from the roots of Panax ginseng C.A. Meyer, efficiently arrests the cell cycle at the G1/S boundary at lower doses, 0.1-5 microM, but induces apoptosis at higher doses, 10-25 microM, the effects of which were associated with selectively elevating protein levels of p53 and p21WAF1 in SK-HEP-1 cells. The cell growth suppressive and apoptosis inducing effects were confirmed by MTT assays together with flow cytometric analyses, morphological changes and DNA fragmentation. Immunoblotting showed that Ginsenoside Rs3 significantly elevated protein levels of p53 and p21WAF1 prior to inducing apoptosis, while it did not elevate those of cyclin E, cyclin A, p27Kip1, and PCNA. Immune complex kinase assays showed that Ginsenoside Rs3 downregulated the activities of both cyclins E- and A-associated kinases.

Solubility Information

<table>
<thead>
<tr>
<th>Solubility</th>
<th>&lt; 1 mg/ml refers to the product slightly soluble or insoluble</th>
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</thead>
</table>

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Solvent</th>
<th>1mg</th>
<th>5mg</th>
<th>10mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>1.209 mL</td>
<td>6.045 mL</td>
<td>12.09 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.242 mL</td>
<td>1.209 mL</td>
<td>2.418 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.121 mL</td>
<td>0.605 mL</td>
<td>1.209 mL</td>
</tr>
<tr>
<td>50 mM</td>
<td>0.024 mL</td>
<td>0.121 mL</td>
<td>0.242 mL</td>
</tr>
</tbody>
</table>

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference