Estrone

Cat. No.: HY-B0234  
CAS No.: 53-16-7  
Molecular Formula: C₁₈H₂₂O₂  
Molecular Weight: 270.37  
Target: Estrogen Receptor/ERR; Endogenous Metabolite  
Pathway: Vitamin D Related/Nuclear Receptor; Metabolic Enzyme/Protease  
Storage: Powder -20°C 3 years  
4°C 2 years  
In solvent -80°C 2 years  
-20°C 1 year

SOLVENT & SOLUBILITY

In Vitro  
DMSO: 25 mg/mL (92.47 mM; ultrasonic and warming and heat to 60°C)  
H₂O: 0.1 mg/mL (0.37 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Concentration</th>
<th>Mass 1 mg</th>
<th>Mass 5 mg</th>
<th>Mass 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td></td>
<td>3.6986 mL</td>
<td>18.4932 mL</td>
<td>36.9864 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td></td>
<td>0.7397 mL</td>
<td>3.6986 mL</td>
<td>7.3973 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td></td>
<td>0.3699 mL</td>
<td>1.8493 mL</td>
<td>3.6986 mL</td>
</tr>
</tbody>
</table>

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: 2.5 mg/mL (9.25 mM); Suspended solution; Need ultrasonic

2. Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (9.25 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Estrone (E1) is a natural estrogenic hormone. Estrone is the main representative of the endogenous estrogens and is produced by several tissues, especially adipose tissue. Estrone is the result of the process of aromatization of androstenedione that occurs in fat cells[1][2].

IC₅₀ & Target

Human Endogenous Metabolite

In Vitro

Estrone is the main endogenous estrogen in postmenopausal women[2].  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.
REFERENCES
