Cimifugin

Cat. No.: HY-N0634
CAS No.: 37921-38-3
Molecular Formula: C₁₆H₁₈O₆
Molecular Weight: 306.31
Target: Others
Pathway: Others
Storage: Powder
        -20°C  3 years
        4°C    2 years
        In solvent: -80°C  6 months
                    -20°C  1 month

SOLVENT & SOLUBILITY

In Vitro
DMSO: 100 mg/mL (326.47 mM; Need ultrasonic)
H₂O: 33.33 mg/mL (108.81 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mM</td>
<td>3.2647 mL</td>
<td>16.3233 mL</td>
<td>32.6467 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>0.6529 mL</td>
<td>3.2647 mL</td>
<td>6.5293 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.3265 mL</td>
<td>1.6323 mL</td>
<td>3.2647 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 (8.16 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (8.16 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (8.16 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
Cimifugin (Cimitin) is a bioactive component of Saposhnikovia divaricata, a Chinese herb. Cimifugin suppresses allergic inflammation by reducing epithelial derived initiative key factors via regulating tight junctions\(^1\).

In Vitro
The effect of Cimifugin (Cimitin) on TSLP decreases significantly when expression of CLDN1 is interfered with siRNA and this implied Cimifugin inhibits initiative cytokines through restoring TJs\(^2\).

MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo

Cimifugin (Cimitin; 12.5 or 50 mg/kg/day; intragastrically; 2 days) significantly inhibits TSLP and IL-33 in the initial stage of Mice are sensitized and challenged with FITC to establish type 2 atopic dermatitis (AD) model. Simultaneously, Cimifugin reduces the separated gap among the epithelial cells and increased the expression of TJs. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES


Caution: Product has not been fully validated for medical applications. For research use only.

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