Clascoterone

**Cat. No.:** HY-13331  
**CAS No.:** 19608-29-8  
**Molecular Formula:** C₂₄H₃₄O₅  
**Molecular Weight:** 402.52  
**Target:** Androgen Receptor  
**Pathway:** Vitamin D Related/Nuclear Receptor  
**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: ≥ 100 mg/mL (248.43 mM)  
*“≥” means soluble, but saturation unknown.

<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></td>
<td>1 mM</td>
<td>2.4843 mL</td>
<td>12.4217 mL</td>
<td>24.8435 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>0.4969 mL</td>
<td>2.4843 mL</td>
<td>4.9687 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.2484 mL</td>
<td>1.2422 mL</td>
<td>2.4843 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: ≥ 2.75 mg/mL (6.83 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.75 mg/mL (6.83 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.75 mg/mL (6.83 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description
Clascoterone (Cortexolone 17 alpha-propionate; Cortexolone 17α-propionate; CB-03-01) is a new topical and peripherally selective androgen antagonist.

#### IC₅₀ & Target
Androgen Receptor[^1].

#### In Vivo
Clascoterone is a new potent topical antiandrogen potentially useful in acne vulgaris. Clascoterone 1% cream was very well
tolerated, and was significantly better than placebo regarding TLC (P = 0.0017), ILC (P = 0.0134) and ASI (P = 0.0090), and also clinically more effective than comparator. The product also induced a faster attainment of 50% improvement in all the above parameters.

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

REFERENCES

