Clascoterone

**Cat. No.:** HY-13331  
**CAS No.:** 19608-29-8  
**Molecular Formula:** C₂₄H₃₄O₅  
**Molecular Weight:** 402.52  
**Target:** Androgen Receptor  
**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 (248.43 mM)  
* "≥" means soluble, but saturation unknown.

<table>
<thead>
<tr>
<th>Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.4843 mL</td>
<td>12.4217 mL</td>
<td>24.8435 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4969 mL</td>
<td>2.4843 mL</td>
<td>4.9687 mL</td>
</tr>
<tr>
<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 (Cortisolone 17 alpha-propionate; Cortisolone 17α-propionate; CB-03-01) is a new topical and peripherally selective androgen antagonist.

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

REFERENCES
