**Etravirine**

Cat. No.: HY-90005  
CAS No.: 269055-15-4  
Molecular Formula: C₂₀H₁₅BrN₆O  
Molecular Weight: 435.28  
Target: Reverse Transcriptase; HIV  
Pathway: Anti-infection  
Storage:  
- Powder: -20°C 3 years, 4°C 2 years  
- In solvent: -80°C 6 months, -20°C 1 month

**SOLVENT & SOLUBILITY**

<table>
<thead>
<tr>
<th>Solvent</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMSO</td>
<td>2.2974 mL</td>
<td>11.4869 mL</td>
<td>22.9737 mL</td>
</tr>
<tr>
<td>H₂O</td>
<td>&lt; 0.1 mg/mL (insoluble)</td>
<td>&lt; 0.1 mg/mL (insoluble)</td>
<td>&lt; 0.1 mg/mL (insoluble)</td>
</tr>
</tbody>
</table>

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

**BIOLOGICAL ACTIVITY**

**Description**  
Etravirine is a non-nucleoside reverse transcriptase inhibitor (NNRTI) used for the treatment of HIV.

**In Vitro**  
TMC125 is highly active against wild-type HIV-1 (50% effective concentration [EC₅₀]=1.4 to 4.8 nM) and shows some activity against HIV-2 (EC₅₀=3.5 μM). TMC125 also inhibits a series of HIV-1 group M subtypes and circulating recombinant forms and a group O virus. TMC125 has activity for 19 viruses with EC₅₀ of < 5 nM[1].

**In Vivo**  
Etravirine has a high genetic barrier to the development of resistance. In phase IIb trials in treatment-experienced patients, including those infected with virus resistant to NNRTIs and protease inhibitors (PIs), TMC125 is active.

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1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
   Solubility: ≥ 2.5 mg/mL (5.74 mM); Clear solution

2. Add each solvent one by one: 10% DMSO >> 90% corn oil  
   Solubility: ≥ 2.5 mg/mL (5.74 mM); Clear solution
against HIV resistant to currently available NNRTIs, with a similar tolerability profile to that of the control group[2].

REFERENCES
