**Product Data Sheet**

**T-1105**

**Cat. No.:** HY-W015764  
**CAS No.:** 55321-99-8  
**Molecular Formula:** C₅H₅N₃O₂  
**Molecular Weight:** 139.11  
**Target:** Influenza Virus  
**Pathway:** Anti-infection

**Storage:**  
- Powder: -20°C, 3 years; 4°C, 2 years  
- In solvent: -80°C, 6 months; -20°C, 1 month

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**SOLVENT & SOLUBILITY**

**In Vitro**

DMSO: 25 mg/mL (179.71 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent 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>7.1886 mL</td>
<td>35.9428 mL</td>
<td>71.8856 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>1.4377 mL</td>
<td>7.1886 mL</td>
<td>14.3771 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.7189 mL</td>
<td>3.5943 mL</td>
<td>7.1886 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 (17.97 mM); Clear solution

2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
   Solubility: ≥ 2.5 mg/mL (17.97 mM); Clear solution

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**BIOLOGICAL ACTIVITY**

**Description**

T-1105, a novel broad-spectrum viral **polymerase** inhibitor, structural analogue of T-705, inhibits the polymerases of RNA viruses after being converted to ribonucleoside triphosphate (RTP) metabolite[1]. T-1105 has antiviral activity against various RNA viruses, including Zika virus (ZIKV), influenza virus, arenaviruses, bunyaviruses, West Nile virus (WNV), yellow fever virus (YFV), and foot-and-mouth disease virus (FMDV). T-1105 can be formed by nicotinamide mononucleotide adenylyltransferase[2].

**IC₅₀ & Target**

Viral polymerase[1]
REFERENCES
