SR0987

Cat. No.: HY-101454
CAS No.: 303126-97-8
Molecular Formula: C₁₆H₁₀ClF₆NO₂
Molecular Weight: 397.7
Target: ROR
Pathway: Metabolic Enzyme/Protease
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: ≥ 150 mg/mL (377.17 mM)
H₂O: < 0.1 mg/mL (insoluble)
* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.5145 mL</td>
<td>12.5723 mL</td>
<td>25.1446 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.5029 mL</td>
<td>2.5145 mL</td>
<td>5.0289 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2514 mL</td>
<td>1.2572 mL</td>
<td>2.5145 mL</td>
<td></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 >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.29 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (6.29 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (6.29 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
SR0987 is a RORγ agonist, with an EC₅₀ of 800 nM.

IC₅₀ & Target
EC₅₀: 800 nM (RORγ) [1]
**In Vitro**

SR0987 clearly shows a concentration dependent induction of reporter gene expression with an EC\textsubscript{50} of ~800nM. SR0987 treatment results in a statistically significant reduction of the surface expression of PD-1 whereas desmostrol treatment shows no effect. Treatment with SR0987 and or desmosterol results in a trend towards increased IL17 production\cite{1}.

### REFERENCES