**Vidofludimus**

**Cat. No.:** HY-14908  
**CAS No.:** 717824-30-1  
**Molecular Formula:** C₂₀H₁₈FNO₄  
**Molecular Weight:** 355.36  
**Target:** Interleukin Related  
**Pathway:** Immunology/Inflammation  
**Storage:**  
- Powder: -20°C for 3 years, 4°C for 2 years  
- In solvent: -80°C for 6 months, -20°C for 1 month

### SOLVENT & SOLUBILITY

**In Vitro**  
DMSO : ≥ 46 mg/mL (129.45 mM)  
*“≥” means soluble, but saturation unknown.*

<table>
<thead>
<tr>
<th>Solvent Concentration</th>
<th>Mass 1 mg</th>
<th>Mass 5 mg</th>
<th>Mass 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.8140 mL</td>
<td>14.0702 mL</td>
<td>28.1405 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.5628 mL</td>
<td>2.8140 mL</td>
<td>5.6281 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2814 mL</td>
<td>1.4070 mL</td>
<td>2.8140 mL</td>
</tr>
</tbody>
</table>

Preparing Stock Solutions

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

### BIOLOGICAL ACTIVITY

**Description**  
Vidofludimus (4SC-101; SC12267) is a novel immunosuppressive drug that inhibits DHODH; inhibits IL-17 secretion in vitro independently of effects on lymphocyte proliferation. IC₅₀ value: Target: DHODH inhibitor. In vitro: 4SC-101 is a potent inhibitor of human DHODH, inhibits lymphocyte proliferation, and uniquely blocks phytohemagglutinin-stimulated IL-17 production by lymphocytes [2]. In vivo: In vivo Vido treatment alone most effectively reduced macroscopic and histological pathology and the numbers of CD3+ T cells. In contrast, similarly reduced nuclear signal transducer and activator of transcription 3 (STAT3) binding and IL-17 levels were observed from animals treated with Vido alone and Vido + Uri. Vido improves TNBS-induced colonic inflammation by a unique dual mode of action [1]. Oral administration of 4SC-101 effectively improved both chronic DSS and acute TNBS colitis in mice. In these colitis models the overall efficacy profile of 4SC-101 was similar to that of dexamethasone [2].

### REFERENCES

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