**VX-222**

**Cat. No.:** HY-75800  
**CAS No.:** 1026785-59-0  
**Molecular Formula:** C₂₅H₃₅NO₄S  
**Molecular Weight:** 445.61  
**Target:** HCV

**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**

*In Vitro*  
DMSO: ≥ 32 mg/mL (71.81 mM)  
*≥* means soluble, but saturation unknown.

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Concentration</th>
<th>Mass 1 mg</th>
<th>Mass 5 mg</th>
<th>Mass 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mM</td>
<td>2.2441 mL</td>
<td>11.2206 mL</td>
<td>22.4411 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>0.4488 mL</td>
<td>2.2441 mL</td>
<td>4.4882 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.2244 mL</td>
<td>1.1221 mL</td>
<td>2.2441 mL</td>
</tr>
</tbody>
</table>

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

**BIOLOGICAL ACTIVITY**

**Description**  
VX-222 (VCH-222) is a novel, potent and selective inhibitor of HCV polymerase with IC₅₀ of 0.94-1.2 μM, 15.3-fold less effective for mutant M423T, and 108-fold less effective for mutant I482L. IC₅₀ Value: 0.94 μM (HCV NS5B 1a); 1.2 μM (HCV NS5B 1b).  
Target: HCV  
VX-222 is a small molecule non-nucleoside inhibitor of HCV NS5B polymerase that is being investigated for the treatment of hepatitis C virus infection. VX-222 exhibits non-competitive and selective inhibition in HCV NS5B of genotype 1a and 1b, with IC₅₀ of 0.94 and 1.2 μM, respectively. VX-222 selectively inhibits the replication of subgenomic HCV genotype 1a and 1b with an EC₅₀ of 22.3 and 11.2 nM, respectively. [1] Similarly, a recent study shows that VX-222 inhibits the 1b/Con1 HCV subgenomic replicon, with an EC₅₀ of 5 nM. In rats and dogs, VCH-222 displays fine pharmacokinetic profile, including low total body clearance and excellent oral bioavailability (greater than 30%) and good ADME properties. VCH-222 is biotransformed by several enzymes (CYP1A1, 2A6, 2B6, 2C8, CYP 3A4, UGT1A3) and is predicted to be actively transported in liver and excreted mainly intact in bile or as glucuronide adducts.
• **Antiviral Res.** 2019 Jul 27;170:104570.

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### REFERENCES

