Brincidofovir

Cat. No.: HY-14532
CAS No.: 444805-28-1
Molecular Formula: C₂₇H₅₂N₃O₇P
Molecular Weight: 561.69
Target: CMV; HSV
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 : 1 mg/mL (1.78 mM; adjust pH to 8 with NaOH and heat to 50°C)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>1.7803 mL</td>
<td>8.9017 mL</td>
<td>17.8034 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
</tbody>
</table>

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

BIOLOGICAL ACTIVITY

Description
Brincidofovir (CMX001), the lipid-conjugated prodrug of Cidofovir (HY-17438), is an orally available, long-acting antiviral. Brincidofovir shows activity against a broad spectrum of DNA viruses including cytomegalovirus (CMV), adenovirus (ADV), varicella zoster virus, herpes simplex virus, polyomaviruses, papillomaviruses, poxviruses, and mixed double-stranded DNA virus infections[1][2].

IC₅₀ & Target
EC50: 5.5 nM (anti-CMV, in PDA at 7 dpi)

In Vivo
Brincidofovir (BCV) (20 mg/kg; p.o.; on days 1, 3, 5, 7, 10, 14, 17, 21, and 24) extends survival in immune-deficient BALB/c nu/nu mice following lethal challenge with IHD-J-Luc VACV[3].

Animal Model: BALB/c nu/nu mice (infected with IHD-J-Luc VACV)[3]
Dosage: 20 mg/kg
<table>
<thead>
<tr>
<th>Administration:</th>
<th>P.o.; on days 1, 3, 5, 7, 10, 14, 17, 21, and 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result:</td>
<td>On days 1, 3, and 5 maintained their weights initially but started to lose weight beginning on day 9 and succumbed between days 24 and 29 postchallenge.</td>
</tr>
</tbody>
</table>

**CUSTOMER VALIDATION**


See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

**REFERENCES**

