**GS-9620**

**Cat. No.:** A3444  
**CAS No.:** 1228585-88-3  
**Formula:** C22H30N6O2  
**M.Wt.:** 410.51  
**Synonyms:** GS 9620; GS9620  
**Target:** Microbiology & Virology  
**Pathway:** HBV  
**Storage:** Store at -20°C

### Solvent & Solubility

Insoluble in H2O; ≥20.55 mg/mL in DMSO; ≥9.9 mg/mL in EtOH with gentle warming and ultrasonic.

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Concentration</th>
<th>Mass</th>
<th>Solvent</th>
<th>1mg</th>
<th>5mg</th>
<th>10mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mM</td>
<td></td>
<td></td>
<td>2.4360 mL</td>
<td>12.1800 mL</td>
<td>24.3599 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td></td>
<td></td>
<td>0.4872 mL</td>
<td>2.4360 mL</td>
<td>4.8720 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td></td>
<td></td>
<td>0.2436 mL</td>
<td>1.2180 mL</td>
<td>2.4360 mL</td>
</tr>
</tbody>
</table>

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

### Biological Activity

**Short summary**  
TLR-7 agonist

**IC₅₀ & Target**

**Cell Viability Assay**

<table>
<thead>
<tr>
<th>Cell Line:</th>
<th>Peripheral blood mononuclear cells (PBMCs) or plasmacytoid dendritic cells (pDCs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation method:</td>
<td>Soluble in DMSO. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.</td>
</tr>
<tr>
<td>Reacting conditions:</td>
<td>14 - 66 nM</td>
</tr>
</tbody>
</table>
### Applications:
In human and cynomolgus monkey PBMCs and/or pDCs, GS-9620 induced interferon (IFN)-alpha and other cytokines, with a minimum effective concentration ranging from 14 to 66 nM in humans and with 5-fold less potency in monkeys.

### Animal experiment

<table>
<thead>
<tr>
<th>Animal models</th>
<th>Cynomolgus monkeys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dosage form</td>
<td>single doses of 0.1 ~ 2.0 mg, daily doses of 0.1 ~ 1.0 mg for 7 days or every other day doses of 0.05 ~ 1.5 mg for 28 days; p.o.</td>
</tr>
</tbody>
</table>

### Applications:
In cynomolgus monkeys, GS-9620 was well tolerated even at the highest oral doses (1.5 mg every other day for 28 days). GS-9620 increased IFN-alpha, immunomodulatory cytokines, chemokines and peripheral blood cell IFN stimulated genes (ISGs) in a dose-dependent manner. In addition, there was no evidence of tachyphylaxis following every other day dosing, and oral administration resulted in limited systemic bioavailability but high oral absorption.

### Other notes:
Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

### Product Citations
See more customer validations on [www.apexbt.com](http://www.apexbt.com).

### References

### Caution

**FOR RESEARCH PURPOSES ONLY.**
**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

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