## Anti-virus agent 1

| Cat. No.:          | HY-131233             |       |          |  |  |
|--------------------|-----------------------|-------|----------|--|--|
| CAS No.:           | 1911578-83-0          |       |          |  |  |
| Molecular Formula: | $C_{24}H_{29}N_6O_8P$ |       |          |  |  |
| Molecular Weight:  | 560.5                 |       |          |  |  |
| Target:            | Antibiotic            |       |          |  |  |
| 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 : 200 mg/mL (3   | DMSO : 200 mg/mL (356.82 mM; Need ultrasonic) |           |           |            |  |  |
|------------------------------|---|---|-----------|-----------|------------|--|--|
| Preparing<br>Stock Solutions | Preparing<br>Stock Solutions  | Solvent Mass<br>Concentration                 | 1 mg      | 5 mg      | 10 mg      |  |  |
|                              |   | 1 mM  | 1.7841 mL | 8.9206 mL | 17.8412 mL |  |  |
|                              | 5 mM  | 0.3568 mL                                     | 1.7841 mL | 3.5682 mL |            |  |  |
|                              | 10 mM   | 0.1784 mL                                     | 0.8921 mL | 1.7841 mL |            |  |  |
|                              | Please refer to the solubility information to select the appropriate solvent.   |   |           |           |            |  |  |
| In Vivo                      | 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline<br>Solubility: 5 mg/mL (8.92 mM); Suspended solution; Need ultrasonic |   |           |           |            |  |  |
|                              | 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)<br>Solubility: ≥ 5 mg/mL (8.92 mM); Clear solution                               |   |           |           |            |  |  |
|                              | <ol> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil<br/>Solubility: ≥ 5 mg/mL (8.92 mM); Clear solution</li> </ol>                       |   |           |           |            |  |  |

| DIOLOGICALACTIV |   |
|-----------------|---|
| Description     | Anti-virus agent 1 (compound 4i), a phosphoramidate proagent of GS-5734 (HY-104077; Remdesivir), has potent antiviral activity. Anti-virus agent 1 is used for the research of coronavirus and Ebola virus (EBOV) <sup>[1][2]</sup> .   |
| In Vitro        | Anti-virus agent 1 (compound 4i) has antiviral activity for EBOV in HeLa cell (EC <sub>50</sub> =1845 nM), HMVEC cell (TERT-immortalized<br>numan foreskin microvascular endothelial cells; ATCC-4025; EC <sub>50</sub> =367 nM), human macrophages (EC <sub>50</sub> =297 nM). Anti-virus<br>agent 1 has a CC <sub>50</sub> of 21 μM in MT4 cell (human leukemia T-cell) <sup>[1]</sup> .<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

# Product Data Sheet

 $H_2N$ 

Ň

о́н о́н



### REFERENCES

[1]. Dustin Siegel, et al. Discovery and Synthesis of a Phosphoramidate Prodrug of a Pyrrolo[2,1-f][triazin-4-amino] Adenine C-Nucleoside (GS-5734) for the Treatment of Ebola and Emerging Viruses. J Med Chem. 2017 Mar 9;60(5):1648-1661.

[2]. Michael O' Neil Hanrahan Clarke, et al. Methods for treating arenaviridae and coronaviridae virus infections. US20170071964A1.

#### Caution: Product has not been fully validated for medical applications. For research use only.

 Tel: 609-228-6898
 Fax: 609-228-5909
 E-mail: tech@MedChemExpress.com

 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA